

# EXPLORING THE LIVED EXPERIENCES OF PATIENTS AFTER CORONARY ARTERY BYPASS GRAFTING: A SCOPING REVIEW OF QUALITATIVE EVIDENCE

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## ABSTRACT

Coronary Artery Bypass Grafting (CABG) is an effective revascularization procedure; however, postoperative recovery extends beyond clinical outcomes and involves complex physical, psychological, social, and spiritual dimensions. Understanding patients' lived experiences is essential to develop holistic and patient-centered care. This study aimed to synthesize qualitative evidence on the lived experiences of patients following CABG. A scoping review was conducted following the Arksey and O'Malley framework and reported in accordance with PRISMA-ScR guidelines. A systematic search was performed across PubMed, Scopus, Taylor & Francis, and EBSCO databases. Studies were selected using predefined inclusion and exclusion criteria based on the PCC (Population, Concept, Context) framework. A total of 14 qualitative studies published between 2015 and 2026, conducted across 10 countries, were included. Data were analysed using a descriptive and thematic synthesis approach, categorizing extracted data to identify recurring patterns, then synthesizing findings across physical, psychological, social, and spiritual dimensions of recovery. The synthesis identified four overarching themes: (1) psychospiritual transformation and meaning reconstruction, (2) gaps in information, communication, and patient involvement, (3) physical burden and functional limitations, and (4) social role disruption and structural barriers to recovery. The synthesis results show that post-CABG patient recovery is influenced by various aspects, including psychospiritual changes, physical limitations, lack of information and patient involvement, and social barriers in carrying out daily roles. Therefore, a more comprehensive treatment approach is needed to optimally support the patient's recovery process.

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## 1. INTRODUCTION

Coronary artery disease (CAD) remains the leading cause of death worldwide, accounting for approximately 9.14 million deaths annually and affecting both high- and low-income countries, with a global prevalence reaching 315 million cases in 2022 and an age-standardized prevalence of 3,605 per 100,000 population an 18% decrease since 1990 where Central and Eastern Europe and Central Asia have the highest prevalence, while South Asia has the lowest [1], [2]. For people with multivessel or left main CAD, coronary artery bypass grafting (CABG) is the preferred treatment, offering better long-term survival and fewer major cardiovascular events than percutaneous intervention or medical therapy alone [3], [4]. However, CABG is a major surgery that leads to a complex recovery process that goes beyond just physical healing.

After CABG, patients face a range of challenges that affect their bodies, minds, social lives, and sense of meaning. Physically, they often deal with chest pain, tiredness, trouble sleeping, and slow recovery that can last for weeks or months after leaving the hospital [5], [6], [7], [8], [9]. Psychologically, between 20% and 40% of patients experience significant anxiety or depression, which can make it harder to stick to rehabilitation, lower their quality of life, and increase the risk of heart problems [10]. Patients also often struggle with changes in their work, family roles, and personal identity, as well as feelings of vulnerability and questions about life and death [11]. Because of these overlapping issues, recovery after CABG is a biopsychosocial process that needs more than just medical care.

Although there are more qualitative studies examining various aspects of life after CABG, the research remains scattered and limited to certain settings. Some studies have focused on issues like fear and uncertainty after surgery, changes in how patients see themselves, and the importance of social support in recovery, but no one has brought these findings together across different groups or care settings [12], [13], [14]. This lack of a big-picture view makes it hard for clinicians and nurses to create care plans that truly meet all patients' needs [15]. This gap is especially important because nurses play a key role in monitoring patients, teaching them, and supporting their overall recovery [16].

A scoping review of qualitative research is the best way to address this gap. According to Arksey and O'Malley (2005), scoping reviews help organise and clarify themes across diverse research and identify areas that warrant further study. This review will bring together and summarise the qualitative research on patients' experiences after CABG [17]. This study adopts a scoping review approach rather than a systematic review due to the heterogeneity of qualitative methodologies, study contexts, and outcome dimensions across the existing literature. Additionally, the aim of this review is exploratory to map, synthesise, and clarify the breadth of patients' lived experiences following CABG rather than to assess intervention effectiveness or generate narrowly defined evidence suitable for systematic review. To address this gap, the review is guided by the following research question: "What are the lived experiences of adult patients following coronary artery bypass grafting (CABG) across different healthcare contexts?"

## 2. RESEARCH METHOD

### 2.1 Study Design

This study employed a scoping review design based on the methodological framework proposed by Arksey and O'Malley (2005), which has been further refined by Levac et al. (2010). The review process followed five key stages: (1) identifying the research questions, (2) identifying relevant studies, (3) selecting eligible studies, (4) charting the data, and (5) collating, summarizing, and reporting the findings [18], [19]. To enhance methodological transparency and rigor, this review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR). This scoping review protocol has not been registered with PROSPERO or any other provider, as scoping reviews are not required for protocol registration.

### 2.2 Eligibility Criteria

The eligibility criteria were developed using the PCC (Population, Concept, Context) framework to ensure alignment with the review objectives. The Population (P) included adult patients who had undergone CABG surgery. The Concept (C) focused on lived experiences following surgery, encompassing physical, psychological, social, and spiritual dimensions explored through qualitative methodologies. The Context (C) covered various healthcare settings globally, including hospitals, cardiac rehabilitation programs, and community-based care environments.

To ensure the relevance and quality of included evidence, specific inclusion and exclusion criteria were applied. Studies were included if they: (1) employed qualitative or mixed-methods designs with extractable qualitative data; (2) were published in peer-reviewed journals; (3) were available in full-text format; and (4) explicitly explored patients' experiences after CABG. Studies were excluded if they: (1) were review articles, editorials, commentaries,

or conference abstracts; (2) used purely quantitative designs without experiential data; (3) did not focus specifically on CABG populations; or (4) were not published in English. No restriction on publication year was applied to capture the evolution of evidence across time and settings.

## 2.3 Search Strategy

A systematic and comprehensive literature search was conducted across four major electronic databases: PubMed, Scopus, Taylor & Francis, and EBSCO on 14 February 2026. The search strategy was developed using a combination of controlled vocabulary (e.g., MeSH terms) and free-text keywords derived from the PCC framework. Key search terms included:

- a. EBSCOhost: ("Coronary Artery Bypass" OR "CABG" OR "Heart Bypass") AND ("Lived Experience" OR "Perception" OR "Perspective" OR "Attitude" OR "Patient Experience") AND ("Qualitative" OR "Phenomenology" OR "Interview" OR "Thematic Analysis")
- b. Scopus: TITLE-ABST-KEYWORDS ("Coronary Artery Bypass" OR "CABG" OR "Heart Bypass") AND ("Lived Experience" OR "Perception" OR "Perspective" OR "Attitude" OR "Patient Experience") AND ("Qualitative" OR "Phenomenology" OR "Interview" OR "Thematic Analysis")
- c. PubMed : ("Coronary Artery Bypass" OR "CABG" OR "Heart Bypass") AND ("Lived Experience" OR "Perception" OR "Perspective" OR "Attitude" OR "Patient Experience") AND ("Qualitative" OR "Phenomenology" OR "Interview" OR "Thematic Analysis")
- d. Taylor and Francis : ("Coronary Artery Bypass" OR "CABG" OR "Heart Bypass") AND ("Lived Experience" OR "Perception" OR "Perspective" OR "Attitude" OR "Patient Experience") AND ("Qualitative" OR "Phenomenology" OR "Interview" OR "Thematic Analysis")

Boolean operators ("AND", "OR") were applied to refine and expand search results, and truncation techniques were used where applicable to capture variations of keywords. The search process was designed to maximize sensitivity and ensure comprehensive coverage of relevant studies. More detail search strategy, can be seen in supplementary files.

## 2.4 Study Selection and Quality Appraisal

The study selection process was conducted in accordance with the PRISMA Extension for Scoping Reviews (PRISMA-ScR) to ensure methodological transparency, rigor, and reproducibility (see Supplementary Files). The process followed sequential stages, including identification, screening, eligibility assessment, and final inclusion of studies. All retrieved records were organized using reference management software to facilitate systematic screening. Initial screening was performed based on titles and abstracts to identify studies relevant to the review objectives and meeting the predefined inclusion criteria. Studies that did not align with the population, concept, or context of the review were excluded. Subsequently, full-text articles were assessed in detail to determine eligibility. The screening process was conducted independently by multiple reviewers to enhance reliability and reduce selection bias. Any discrepancies were resolved through discussion and consensus, with a third reviewer consulted when necessary.

Methodological quality appraisal was conducted using the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Qualitative Research. In line with contemporary scoping review guidance, the appraisal was applied descriptively to map the methodological rigor of included studies rather than as a basis for exclusion. All included studies met the minimum criteria for qualitative research and were retained for synthesis, consistent with the scoping review approach, which prioritizes comprehensive mapping of evidence while using quality appraisal to inform the interpretation of findings.

## 2.5 Data Extraction

Data extraction was conducted using a standardized data charting form developed specifically for this review to ensure consistency, transparency, and comprehensiveness. The process was performed independently by the reviewers, and any discrepancies were resolved through discussion and consensus. The extracted data included: (1) study characteristics (author, year, and country), (2) study design and methodological approach, (3) participant characteristics, (4) data collection methods, and (5) key findings related to patients' lived experiences following CABG. All extracted data were systematically organized into a structured tabular format to facilitate comparison across studies and to provide a clear overview of the evidence base. This approach supported the identification of patterns in study characteristics as well as thematic similarities and differences across the included studies

## 2.6 Data Analysis

Data analysis was conducted using a descriptive and thematic synthesis approach. Initially, extracted data were reviewed and categorized to identify recurring patterns and key concepts related to postoperative experiences. Thematic analysis was then applied to synthesize findings across studies, focusing on major dimensions of recovery, including physical, psychological, social, and spiritual aspects. The analysis also explored methodological trends and identified gaps in the existing literature, particularly in relation to cultural context and underexplored patient experiences. Findings were synthesized narratively to provide a comprehensive overview of the current state of knowledge.

## 3. RESULT AND ANALYSIS

### 3.1 Study Selection

A systematic search across four electronic databases yielded a total of 1,059 records: PubMed (n = 61), Scopus (n = 243), Taylor and Francis (n = 607), and EBSCO-host (n = 148). After removing 43 duplicate records, 1,016 articles proceeded to the title and abstract screening stage. Of these, 993 articles were excluded because they did not meet the predefined inclusion criteria for relevance to the topic, leaving 23 articles to advance to the full-text eligibility assessment.

During the full-text review, nine articles were excluded for the following reasons: not published in English (n = 1), study design not appropriate (n = 2), population not appropriate (n = 4), and two additional articles were excluded due to study design incompatibility. The remaining 14 articles met all eligibility criteria and were assessed for methodological quality using the JBI Critical Appraisal Tools. All 14 studies were retained following quality appraisal and were included in the final synthesis. The complete study selection process is illustrated in the PRISMA-ScR flow diagram (Figure 1)

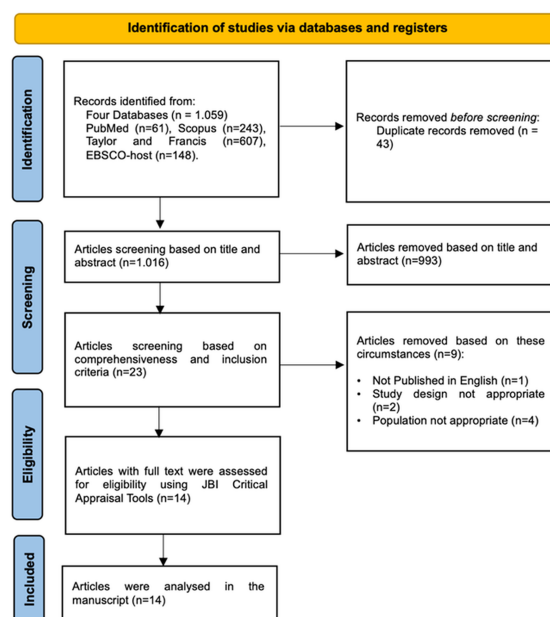


Figure 1: PRISMA Flowchart

### 3.2 Quality Appraisal Results

The methodological quality of the included studies was assessed using the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Qualitative Research (Table 1). Overall, the 14 included studies demonstrated high methodological quality, with JBI scores ranging from 8 to 10 out of a possible 10. The majority of studies achieved scores of 9 or higher, indicating strong methodological rigor and consistency in qualitative research design and reporting. Most studies showed clear congruity between the research aims, methodology, data collection methods, and data analysis, suggesting a coherent and well-executed qualitative approach. Ethical considerations were also adequately addressed in nearly all studies, with explicit reporting of ethical approval and participant consent. In addition, participants' perspectives were generally well represented, often supported by illustrative quotations that strengthened the credibility of the findings.

Table 1: JBI Critical Appraisal

Author(s) & Year	Design	JBI Score
Altinbas & Yavuz van Giersbergen, 2021 [20]	Qualitative study	9/10
Arikan & Demir Korkmaz, 2025 [7]	Qualitative study	10/10
Borah et al. (2023) [21]	Qualitative study	10/10
Kemp et al. (2021) [22]	Qualitative study	9/10
Larsson et al., 2023 [23]	Qualitative study	9/10
Mendonça & Andrade, 2015 [24]	Qualitative study	8/10
Mohammadi et al., 2015 [25]	Qualitative study	8/10
Mortensen et al., 2025 [26]	Qualitative study	9/10
Neto et al. (2024) [15]	Qualitative study	8/10
Pourebrahimi et al. (2021) [27]	Qualitative study	9/10
Rajendran et al. (2024) [28]	Qualitative study	9/10
Taylan et al. (2022) [29]	Qualitative study	8/10
Wang et al., 2025 [30]	Qualitative study	9/10
Xiu et al., 2026 [31]	Qualitative study	9/10

### 3.3 Study Characteristics

14 qualitative studies published between 2015 and 2026 were included in this scoping review (Table 2). These studies utilized a range of methodological approaches, such as hermeneutic phenomenology [25], [31], descriptive phenomenology with Colaizzi's method [30], Heidegger's framework [29], and qualitative descriptive [15], [20], [21], [22], [23], [26], [29]. Data collection was primarily conducted through semi-structured in-depth interviews, and analysis employed thematic, content, and interpretive phenomenological approaches. The diversity of methodologies underscores the complex and multidimensional nature of post-CABG lived experience.

The included studies were conducted across Asia, Europe, South America, and North America, with representation from Turkey (n=3), Iran (n=2), India (n=2), Brazil (n=2), China (n=2), Sweden (n=1), Norway (n=1), and Canada (n=1). Participants were primarily adult post-CABG patients, with ages ranging from 45 to 70+. While most participants were male, several studies intentionally included female or gender-diverse samples [7], [26].

#### Thematic Analysis of Patients' Lived Experiences Following CABG

##### Theme I: Psychospiritual Transformation and Meaning Reconstruction

Across studies, a consistent pattern emerged: patients described CABG as a profound existential event that catalysed fundamental shifts in values, spiritual identity, and life priorities. Mohammadi et al. (2015) and Rajendran et al. (2024) both documented a sense of "second chance at life," in which participants articulated a deepened spiritual orientation, renewed family bonds, and an intensified desire to live [25], [28]. This psychospiritual transformation was not passive; rather, it reflected active meaning reconstruction, as patients reinterpreted their illness narratives in relation to mortality and hope. Spirituality functioned simultaneously as a coping resource and a source of renewed existential purpose, particularly in studies conducted within culturally and religiously embedded contexts [25], [29], [28].

Concurrently, this transformative experience was persistently shadowed by fear of death, surgical complications, and disease recurrence. Arikan and Demir Korkmaz (2025) observed that existential uncertainty remained central to frail patients' postoperative narratives [32], while Mendonça and Andrade (2015) found that anticipatory anxiety prior to surgery was often more psychologically burdensome than the procedure itself [33]. These findings reflect a broader dialectic between hope and vulnerability that characterises the post-CABG psychospiritual experience.

##### Theme II: Gaps in Information, Communication, and Patient Involvement

A pervasive pattern of inadequate patient education and communication deficits emerged across studies, irrespective of the national healthcare context. Neto et al. (2024) reported that over half of post-CABG patients in Brazil received insufficient perioperative orientation, resulting in unmet educational needs regarding disease processes, surgical procedures, and recovery expectations [34]. Kemp et al. (2021) identified the hospital-to-home transition as the most informationally vulnerable phase, with patients in Canada emphasising that clear communication was more critical to their recovery than technical surgical outcomes alone [35].

Limited patient involvement in care decisions further contributed to communication challenges. Wang et al. (2025) found that post-CABG patients in China had little awareness of shared decision-making during cardiac rehabilitation, hindered by paternalistic norms, lack of knowledge, and psychological barriers [36]. Pourebrahimi et al. (2021) reported that patients often withheld concerns about sexual dysfunction due to cultural taboos and a lack of open communication [37]. Altinbas and Yavuz van Giersbergen (2021) also found that even in patient-centred care models, participants had unmet needs for preoperative information [38]. Overall, these findings show that informational and communication failures are modifiable but remain a neglected barrier to post-CABG recovery.

### Theme III: Physical Burden and Functional Limitations in Recovery

Physical burden constituted a dominant theme across the included studies, characterised by persistent pain, fatigue, restricted mobility, and a recovery trajectory consistently perceived as slower and more arduous than anticipated. Larsson et al. (2023) documented that surgical site complications following saphenous vein harvesting imposed substantial functional limitations and anxiety [39], while Arikan and Demir Korkmaz (2025) found that pre-existing frailty further compounded physical recovery challenges, resulting in extended hospitalisation and intensified dependence [40]. Borah et al. (2023) identified physical exhaustion as a primary barrier to adherence to cardiac rehabilitation in India, with fatigue rendering prescribed exercise regimens practically unachievable in the early recovery phase [41]. These findings are consistent across diverse healthcare settings, indicating that physical burden is a universal feature of the post-CABG experience [42].

A common finding was the gap between patients' preoperative expectations and their actual postoperative physical experience. Mortensen et al. (2025) [26] highlighted this most clearly, with women returning to work reporting that physical and cognitive complications were more severe and lasted longer than expected. Xiu et al. (2026) showed that physical barriers to home-based rehabilitation changed over time, with confidence improving only gradually [31]. These findings suggest that patients are often underprepared for the extended recovery after CABG, highlighting the need for realistic preoperative counselling and ongoing physical support after discharge.

### Theme IV: Social Role Disruption and Structural Barriers to Recovery

Post-CABG recovery often disrupted patients' roles within their families, workplaces, and communities, highlighting the social dimensions of recovery. Mortensen et al. (2025) described women's return to work in Norway as a "lonesome struggle," marked by limited institutional support, lack of employer accommodation, and gender-specific challenges [26]. Arikan and Demir Korkmaz (2025) found that physical dependence after CABG undermined patients' social roles, leading to psychological distress and economic hardship. These findings show that social role disruption both results from and intensifies the physical and psychological challenges of recovery.

Structural and economic barriers also influenced recovery in low- and middle-income settings. Borah et al. (2023) identified transportation costs for outpatient follow-up as a major barrier to rehabilitation in India [21]. Xiu et al. (2026) found that cultural beliefs favouring rest over physical activity conflicted with rehabilitation recommendations in China [31]. While family support was important in several studies [25], [31], [28], overprotective behaviour sometimes limited patients' physical activity and confidence. These findings show that structural barriers to post-CABG recovery exist at individual, family, economic, and systemic levels, highlighting the need for holistic, context-sensitive rehabilitation approaches.

Table 2: Data Extraction

Author(s) Year	&	Country	Study Design	Sample Charac- teristics	Data Collection
Altinbas & Yavuz van Giersbergen, 2021 [20]		Turkey	Qualitative descrip- tive; thematic anal- ysis; SBNC frame- work	n=23; mean age 60.91 yrs; 73.9% male; 95.7% mar- ried; first-time CABG	In-depth interpretative & postoperative semi- structured interviews
Arikan & Demir Korkmaz, 2025 [7]		Turkey	Qualitative phe- nomenology; SRQR-guided; criterion sampling	n=14; mean age 65.6 yrs; 9 female, 5 male; 13 married; identified frail via Modified Fried Cri- teria; mean hospi- tal stay 19.79 days	Semi-structured in-depth interviews; early post- discharge period; mean 35 min; audio-recorded

Author(s) & Year	Country	Study Design	Sample Characteristics	Data Collection
Borah et al. (2023) [21]	India	Qualitative descriptive	7 patients (post-CABG); 6 male, 1 female; ages 45–70	In-depth semi-structured interviews
Kemp et al. (2021) [22]	Canada	Phenomenological approach	8 patients (post CABG); 7 male, 1 female; age 55–84 years	Semi-structured telephone interviews
Larsson et al., 2023 [23]	Sweden	Qualitative descriptive	n=16; median age 68.5 yrs; 81% male; all had antibiotics + surgical wound revision	Semi-structured face-to-face interviews; 20–45 min; audio-recorded; verbatim transcription
Mendonça & Andrade, 2015 [24]	Brazil	Qualitative exploratory; discourse analysis	n=9; age 45-65 yrs; 7 male, 2 female; all awaiting CABG; no psychotropic drug use	Semi-structured interviews; private setting; audio-recorded; mean 60 min
Mohammadi et al., 2015 [25]	Iran	Hermeneutic phenomenology (Van Manen's method)	n=11; age 49–80 yrs; 7 male, 4 female; all married; 6 months post-CABG	Face-to-face interviews; 55–70 min; audio-recorded
Mortensen et al., 2025 [26]	Norway	Qualitative descriptive; reflexive thematic analysis (RTA); critical realist perspective	n=9 women; age 28–65 yrs; all employed pre-surgery; underwent median sternotomy; mean sick leave 7.1 months	Semi-structured interviews (in-person & digital Zoom/Teams); 43-75 min
Neto et al. (2024) [15]	Brazil	Descriptive study with a qualitative approach	n=13 patients post CABG; 9 male, 4 female; aged 56–71 years old	Semi-structured interview
Pourebrahimi et al. (2021) [27]	Iran	Qualitative research	n=12 post CABG; aged 54-66 years	In-depth, semi-systematic, individualized, and face-to-face interviews
Rajendran et al. (2024) [28]	India	Generic qualitative descriptive	11 patients (post-CABG); age 30-70	Comprehensive semi-structured in-person interviews
Taylan et al. (2022) [29]	Turkey	Qualitative research design	n=8 post CABG; ages 51 and 70	Semi-structured interview form
Wang et al., 2025 [30]	China	Qualitative phenomenology; Colaizzi's method	n=19; mean age 72.2 yrs; 73.7% male; three tertiary hospitals; phases 1-3	Semi-structured in-depth interviews (face-to-face and online); 16-42 min
Xiu et al., 2026 [31]	China	Hermeneutic phenomenology guided by Health Belief Model (HBM)	n=18; mean age 59.94 yrs; 44% female; post-CABG; >12 months post-discharge	Semi-structured face-to-face interviews; 30-45 min

Author(s) & Year	Data Analysis	Key Findings	Themes Identified
Altinbas & Yavuz van Giersbergen, 2021 [20]	Thematic data analysis	SBNC increased hope and facilitated adaptation to surgery; improved patient satisfaction; patients expressed need for more preoperative information; family and social support were critical strengths	Preoperative: perception of being strong or weak; care process; effects of heart disease; need for knowledge; Postoperative: perception of being strong or weak; surgery satisfaction or regret; care process; education
Arikan & Demir Korkmaz, 2025 [7]	Inductive content analysis + thematic analysis	Frail CABG patients face physical, psychological, and economic challenges; family, healthcare staff, and beliefs are key coping resources; need for better communication	Problems: physical, psychological, economic; Coping: relationships and beliefs; Perceptions toward CABG; Expectations: communication and information
Borah et al. (2023) [21]	Manual thematic analysis	Adherence is hindered by barriers such as strict diet, physical exhaustion, and transportation costs	Dietary restrictions; Physical activity; Medication follow-up; Financial constraints; Stress after CABG
Kemp et al. (2021) [22]	Thematic analysis	Patients prioritize humanized care and clear communication; transition from hospital to home is vulnerable	Overall experience; Communication; Hospital environment; Care needs; Person-centered care
Larsson et al., 2023 [23]	Qualitative inductive content analysis	SSI causes physical and psychological impacts; pain, anxiety, and limitations are common; most satisfied after recovery	Physical impact; Complications; Pain; Daily limitations; Psychological responses
Mendonça & Andrade, 2015 [24]	Discourse analysis (Minayo)	Patients experience anxiety, fear, denial, and concern for family; pre-surgery anticipation is stressful	Life changes; Anxiety; Fear; Denial; Family concern; Feelings about anesthesia
Mohammadi et al., 2015 [25]	Thematic analysis (Van Manen)	Patients gain hope, stronger family bonds, and spirituality; surgery seen as second chance	Family attention; Hope; Spiritual orientation
Mortensen et al., 2025 [26]	Reflexive thematic analysis	Women face challenges such as complications, unmet expectations, loneliness, and inadequate aftercare	Expectation mismatch; Loneliness; Reconsidering work value
Neto et al. (2024) [15]	Content analysis	Patients demonstrated substantial unmet educational needs across the perioperative period, including understanding of the disease process, surgical procedures, recovery expectations, and post-operative care. A majority of participants (53.85%) reported not receiving adequate pre- or post-operative orientation, resulting in uncertainty and limited preparedness for recovery.	The learning needs that were analyzed were divided into five classes: Events that precede the surgery in the hospital Instructions received about the surgery Sites and recovery time after surgery General questions about the surgery and content for the educational resource

Author(s) Year	&	Data Analysis	Key Findings	Themes Identified
Pourebrahimi et al. (2021) [27]		Content analysis approach	Patients who have undergone coronary artery bypass graft surgery often experience considerable uncertainty regarding sexual activity, particularly during the initial resumption of intercourse, which is frequently described by fear and avoidance.	Dimensions of confusion in patients' sexual intercourse after CABG in four subcategories: challenges of the first intercourse after surgery, ambiguity in how to obtain information, the ambiguity of sexual issues after surgery, and spouse concerns about having sexual intercourse.
Rajendran et al. (2024) [28]		Van Manen's Phenomenological Analysis	Recovery is a dual experience: patients feel a "renewed lease on life" and spiritual growth, but also struggle with physical frailty and a constant fear of recurrence.	One main theme was constructed, namely the desire to live; this theme constitutes three sub-themes: Obtaining family attention Cherishing hope Having a spiritual perspective
Taylan et al. (2022) [29]		Heidegger's phenomenological approach	Patients' experiences following CABG were characterized by both negative and positive dimensions, reflected in feelings of fear, vulnerability, and insecurity when lacking support from healthcare professionals, and feelings of safety and well-being when supported.	Theme 1. If you're bad, I'm bad, too Theme 2. If you're good, I am safe
Wang et al., 2025 [30]		Colaizzi's 7-step phenomenological analysis	Patients showed limited SDM awareness, relying on paternalistic norms; hindered by knowledge gaps, poor communication, psychological barriers, and fear of decision-making responsibility.	Patient perception of participation in SDM during cardiac rehabilitation: Ambiguity in SDM roles Limited decision-making capacity Communication quality effects Psychological barriers Patients' demand for participation in SDM: Needs: knowledge, continuous resources, family support, decision aids
Xiu et al., 2026 [31]		Interpretive phenomenological analysis; Gadamerian hermeneutic approach	Adherence shaped by family dynamics, cultural beliefs (rest over exercise), physical barriers, confidence sources, and evolving perceptions across early/middle/long-term phases.	Family support as a double-edged sword Barriers rooted in traditional beliefs Physical barriers to exercise Multidimensional sources of confidence Evolving perceptions across rehabilitation phases

### 3.4 Discussion

This scoping review aims to comprehensively explore the lived experiences of patients following CABG by integrating evidence from 14 qualitative studies conducted across 10 countries. Coronary artery disease remains a leading cause of global morbidity and mortality, and CABG continues to be one of the most effective surgical interventions in its management [32], [33]. However, clinical success does not necessarily guarantee optimal recovery, as postoperative experiences are inherently multidimensional and extend beyond biomedical parameters alone [25],

[34]. Four overarching themes were identified: psychospiritual transformation and meaning reconstruction; gaps in information, communication, and patient involvement; physical burden and functional limitations; and social role disruption and structural barriers to recovery. Collectively, these themes affirm that CABG recovery extends far beyond biomedical parameters, demanding an integrated biopsychosocial-spiritual approach to care [25], [34].

Across the included studies, patients often viewed CABG as more than a medical procedure, describing it as a deeply transformative life event. Many referred to it as a “second chance at life,” which led to stronger spiritual beliefs, closer family relationships, and a reassessment of personal priorities [25], [29], [28]. This aligns with the concept of post-traumatic growth, where life-threatening experiences can foster significant psychological and existential development [35].

However, this positive transformation did not eliminate emotional distress. Patients continued to experience uncertainty about the future, fear of death, and ongoing anxiety during the postoperative phase, especially among those with frailty [7] and those awaiting surgery [6], [24]. The presence of both hope and vulnerability underscores the complexity of patients’ psychological responses, which standard biomedical assessments often overlook. These findings highlight the need to include psychological and spiritual evaluations in routine postoperative nursing care to support holistic patient recovery.

The second theme is gaps in information, communication, and patient involvement emerged as a key modifiable barrier to recovery. Across studies, patients consistently reported receiving inadequate perioperative information regarding their condition, procedures, and self-management, which may negatively affect recovery and adherence [17], [36]. The transition from hospital to home was identified as a particularly vulnerable phase, where clear communication was perceived as more critical than surgical outcomes alone [22]. Notably, these challenges were evident even in well-resourced settings, suggesting that the issue is structural rather than purely resource-related [20]. Limited engagement in shared decision-making compounded by paternalistic clinical norms documented in China [30] and the systematic avoidance of discussions around sexual dysfunction due to cultural taboos [27], further illustrate the depth of communication failures in current post-CABG care. These findings are consistent with recent evidence that informational and communicative inadequacies constitute one of the most persistent yet addressable barriers to post-cardiac surgery recovery [33].

Physical burden characterised by pain, fatigue, restricted mobility, and wound complications was universally prominent across included studies. Larsson et al. (2023) documented that saphenous vein harvesting site complications imposed substantial functional limitations [23], while Arikan and Demir (2025) demonstrated that frailty significantly compounded recovery challenges [7]. A critical and recurring observation was the substantial gap between patients’ preoperative expectations and their actual postoperative physical experience, most clearly articulated by Mortensen et al. (2025) among women returning to work [26]. Fatigue was identified as a primary barrier to cardiac rehabilitation adherence in India [21], while Xiu et al. (2026) found that patient confidence in home-based rehabilitation improved only gradually over time [31]. These findings suggest that patients are systematically underprepared for the extended physical demands of CABG recovery, pointing to the urgent need for individualized preoperative counselling and structured physical support programmes extending beyond hospital discharge.

Disruption of social roles is a clinically significant yet frequently neglected aspect of post CABG recovery. Mortensen et al. (2025) reported that women in Norway experienced returning to work as an isolated process, impeded by insufficient institutional support, gendered domestic responsibilities, and inflexible employers [26]. These findings indicate that current cardiac rehabilitation programmes often fail to incorporate gender as a critical factor in recovery. In low- and middle-income countries, additional structural and economic barriers, such as transportation costs in India [21] and cultural beliefs prioritising rest over physical activity in China further constrain rehabilitation efforts [31]. While family support generally provided protection in collectivist cultures overprotective behaviours occasionally diminished patients’ physical activity and autonomy [25], [31], [28]. Collectively, these findings underscore the need for holistic, context-sensitive rehabilitation models that address recovery at individual, relational, and systemic levels.

This review shows that recovery after CABG is a multidimensional process that extends beyond physiological stabilisation. In 14 qualitative studies across 10 countries, patients consistently reported challenges related to psychospiritual adjustment, informational gaps, physical burden, and social disruption, regardless of care setting. This consistency indicates that these challenges are not limited to specific contexts but reflect broader structural and professional issues in post-CABG care.

Nurses play a central role in supporting patients throughout recovery after CABG, addressing physical, psychological, and social needs. Their responsibilities include preoperative preparation, postoperative management to ensure stability and prevent complications, and psychological support to reduce anxiety and encourage positive coping [37], [38]. Nurses also provide essential health education on lifestyle changes, medication adherence, and recovery expectations, which are critical for long-term outcomes [39]. Ongoing follow-up and discharge planning further enhance recovery and quality of life [40]. Additionally, nurses identify and address barriers to recovery, in-

cluding physical, social, and economic challenges [41], [42]. These roles position nurses as key providers of holistic, patient-centred care that supports optimal recovery after CABG.

Several limitations of this review should be acknowledged. First, the search was restricted to studies published in English, which may have excluded relevant research conducted in other languages and potentially introduced language bias. Second, as this review was not prospectively registered in a protocol repository such as PROSPERO or OSF, the risk of post-hoc modification of review objectives cannot be fully ruled out. Third, although the included studies were retrieved from multiple databases, publication bias remains a concern, as qualitative studies reporting less favourable or inconclusive findings may be less likely to be published and indexed. Finally, as researchers involved in this review have professional backgrounds in nursing and cardiac care, their familiarity with the subject matter may have influenced the interpretation and synthesis of findings. The reviewers remained reflexively aware of this positionality throughout the analytical process, and efforts were made to ground interpretations in the data rather than in prior assumptions.

#### **4. CONCLUSION**

This scoping review highlights that recovery following coronary artery bypass grafting (CABG) is a complex and multidimensional process that extends far beyond physical healing. Across the included qualitative studies, patients consistently described recovery as involving interconnected psychospiritual transformation, gaps in information and communication, persistent physical burden, and disruptions in social roles. These findings indicate that postoperative challenges are not limited to specific healthcare settings, but reflect broader structural gaps in how recovery is currently understood and managed.

The review underscores the need to move beyond a predominantly biomedical focus toward a more holistic, patient-centered approach that integrates psychological, social, and spiritual dimensions of care. In particular, improving patient education, strengthening communication, and ensuring continuity of care across the hospital-to-home transition are critical to supporting optimal recovery. Nurses, as key providers of continuous and holistic care, play a central role in addressing these needs and bridging existing gaps in practice.

Future research should adopt longitudinal qualitative designs to better capture the dynamic nature of recovery over time, include perspectives from underrepresented regions, and evaluate the effectiveness of nurse-led interventions that address the full spectrum of patient experiences. Ultimately, recognising recovery as a biopsychosocial-spiritual journey is essential to ensure that the clinical success of CABG translates into meaningful improvements in patients' long-term well-being and quality of life.

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