Physical Activity, Exercise-Related Measures and Multimorbidity: A Narrative Review

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Abstract

Introduction: Multimorbidity, commonly defined as the coexistence of two or more chronic conditions, is associated with poorer health outcomes, reduced quality of life, and greater healthcare needs. Physical activity and structured exercise may contribute to its prevention and management.
Aim: To examine and critically summarise evidence on physical activity and structured exercise in relation to multimorbidity development, progression, and health outcomes in adults.
Methods: A selective narrative review was conducted using PubMed, Scopus, and Web of Science. Searches were performed in June 2026 and updated in September 2026. Twelve original, peer-reviewed studies published in English between 2015 and 2026 were included. Methodological quality and risk of bias were assessed using design-specific tools. The synthesis distinguished baseline multimorbidity status, habitual physical activity, and structured exercise.
Results: Higher physical activity was associated with lower mortality and longer modelled life expectancy. Findings for multimorbidity onset and progression, physical and cognitive function, and mental health were mixed. One randomised trial found improved health-related quality of life with combined exercise and self-management, although clinical importance was unclear and other outcomes showed inconsistent improvements. Predominantly observational evidence, heterogeneity, and potential bias limited causal inference and study comparisons.
Conclusion: The clearest observational evidence concerned lower mortality. Evidence for other outcomes and the independent effects of structured exercise was less conclusive. Further studies should identify effective and safe activity types and doses for different multimorbidity profiles.

Keywords: Physical activity, exercise, multimorbidity, multiple chronic conditions

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1. Introduction

Multimorbidity, defined as the coexistence of two or more chronic conditions, is increasingly common (Hacker, 2024). It is associated with higher mortality, poorer quality of life, reduced functional capacity and greater healthcare needs (Skou et al., 2022). Common co-occurring conditions include hypertension, ischaemic heart disease, heart failure, type 2 diabetes, obesity and chronic respiratory disease (Agress et al., 2024; Petrie et al., 2018). Cardiovascular disease (CVD) remains a leading cause of death worldwide (World Health Organization, 2025).

Regular physical activity supports cardiometabolic health and physical function (World Health Organization, 2024). Physical activity encompasses bodily movement that requires energy expenditure. Exercise is a planned, structured and repetitive form of physical activity intended to maintain or improve fitness (Anderson & Durstine, 2019).

Evidence on physical activity and health outcomes in adults with multimorbidity is mixed. Differences in baseline morbidity, disease definitions and activity measures limit comparability across studies. This review considers these differences and examines habitual physical activity and prescribed exercise separately.

2. Aim of the article

To examine and critically summarise evidence on physical activity and structured exercise in relation to multimorbidity development, progression, and health outcomes in adults.

3. Methods

Review Design and Literature Search

A selective narrative review synthesised evidence from original studies on physical activity and structured exercise in the context of multimorbidity in adults.

PubMed, Scopus, and Web of Science were searched in June 2026, with an update in September 2026, for English-language, peer-reviewed original studies published between 2015 and 2026. The general search logic was: (“multimorbidity” OR “multi-morbidity” OR “multiple chronic conditions” OR “multiple long-term conditions” OR “multiple morbidity” OR “comorbidity”) AND (“physical activity” OR exercise* OR “exercise therapy” OR “exercise training” OR “motor activity” OR “leisure-time physical activity” OR walking OR “aerobic training” OR “resistance training”) AND (adult* OR “middle aged” OR older OR elderly). Database-specific queries and filters were not fully retained.

Eligibility and Study Selection

Eligible publications were full-text observational or interventional studies examining physical activity, exercise, or exercise-related indicators in adults in the context of multimorbidity. Populations included adults with established multimorbidity, those initially without multimorbidity assessed for its development, and mixed populations with relevant analyses. Disease-class and composite-condition approaches were distinguished from the conventional criterion of at least two chronic conditions.

Reviews and meta-analyses informed the background and discussion but were excluded from the primary-study synthesis. Conference abstracts, protocols without results, and unrelated publications were excluded.

Both authors (SČ and AL) jointly conducted searches, title/abstract screening, full-text assessment, data extraction, and verification, resolving decisions by consensus. Initial screening counts and complete exclusion reasons were not systematically recorded; therefore, the selection process could not be reliably reconstructed, limiting transparency and reproducibility and introducing potential selection bias.

Data Extraction

Extracted data covered study design, setting, sample, follow-up, multimorbidity criteria and baseline status, activity measures and dose, exercise delivery and comparators, outcomes, adjusted estimates with confidence intervals, confounders, sensitivity analyses and adverse events.

Methodological Quality and Risk of Bias

Both authors jointly appraised available full texts for methodological quality and risk of bias and reached consensus. The Newcastle–Ottawa Scale (NOS) assessed cohort study selection, comparability, outcome ascertainment, and follow-up (Wells et al., n.d.). Inapplicable criteria were marked accordingly, precluding overall scores.

NOS applicability was limited for the longitudinal observational post hoc analysis by Savikangas et al. (2024), as original randomisation did not ensure comparability between disease-defined groups. Cross-sectional studies were assessed using the JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies (Joanna Briggs Institute, 2017). Risk of Bias 2 was applied only to 12-month health-related quality of life in Skou et al. (2025), covering all five domains (Sterne et al., 2019). Insufficient reporting was judged as uncertainty. Tool-specific assessments informed interpretation and were kept separate. SANRA guided manuscript preparation and self-assessment (Baethge et al., 2019).

Data Synthesis

Both authors synthesised findings narratively by outcome, prioritising adjusted estimates and considering effect measures, baseline morbidity, disease scope, measurement, and cohort overlap. Habitual activity, prescribed exercise, and physical fitness were considered separately. Observational associations and intervention effects were interpreted in light of study design, potential confounding, and intervention comparators and components. The selective review design and clinical and methodological heterogeneity precluded meta-analysis.

4. Results

The synthesis included 12 studies (2017–2025): eight longitudinal observational studies, two cross-sectional studies,

one exploratory post hoc analysis of a randomised trial and one pragmatic randomised controlled trial (Table 1).

In cohort studies, UK Biobank selection limited generalisability (Chudasama et al., 2019, 2020; Liu et al., 2023), and incomplete reporting of attrition added uncertainty in Veronese et al. (2025). Reliance on self-reported data raised concerns about measurement bias. Cross-sectional designs precluded establishing temporal direction (Vancampfort et al., 2017; Schmidt et al., 2025), although accelerometry reduced reliance on recall in Schmidt et al. (2025). Original randomisation did not ensure comparability between disease-defined groups in the post hoc analysis by Savikangas et al. (2024). In Skou et al. (2025), participants knew their allocation and self-reported quality of life, resulting in a high risk of measurement bias for the 12-month primary outcome. Missing data and incomplete verification of the prespecified analysis plan added uncertainty.

Dhalwani et al. (2017) used marginal structural models to address time-varying confounding. Ryan et al. (2018) adjusted for age, sex, education, BMI, smoking, and socioeconomic status. Liu et al. (2023) adjusted for demographic, socioeconomic, and lifestyle factors and excluded first cardiometabolic events within two years in sensitivity analyses. Chudasama et al. (2019, 2020) adjusted for sociodemographic and lifestyle factors and excluded deaths within two years. This exclusion could not be applied from the later accelerometry assessment (Chudasama et al., 2019). Mou et al. (2025) adjusted for age, sex, BMI, socioeconomic and residential factors, smoking, alcohol, and sleep, with additional adjustment for depression, exercise, and sedentary behaviour in sensitivity analyses. Veronese et al. (2025) adjusted for demographic and lifestyle factors and baseline limitations in activities of daily living. Exclusion of early deaths was not reported. Ojijieme et al. (2024) adjusted for demographic, socioeconomic, and time-varying lifestyle factors. Residual confounding and reverse causation remained possible.

Multimorbidity definitions and ascertainment varied across studies (Table 2). Definitions ranged from cardiometabolic to broader physical and mental multimorbidity, limiting comparability. Studies assessed incident multimorbidity, enrolled adults with established multimorbidity, or included mixed samples. Ojijieme et al. (2024) defined disease classes by ≥1 condition, while Savikangas et al. (2024) analysed individual condition indicators.

Table 3 summarises physical activity measures, classification thresholds, and prescribed exercise programmes. Measures included frequency-based self-report, IPAQ-based questionnaires, and accelerometry. Liu et al. (2023) distinguished weekly activity volume (MET-min) from the proportion attributable to vigorous activity. Variation in measures and thresholds limited comparability. Only Savikangas et al. (2024) and Skou et al. (2025) examined prescribed exercise programmes.

Compared with low self-reported activity, adjusted relative risks for moderate and high activity were 1.00 (95% CI 0.85–1.19) and 1.04 (0.88–1.23) for multimorbidity onset, and 0.94 (0.85–1.06) and 0.92 (0.81–1.04) for progression, respectively (Ryan et al., 2018). Self-reported physical activity was not significantly associated with multimorbidity onset or progression.

5. Discussion

Evidence on multimorbidity onset and progression was mixed. Inactivity was associated with incident multimorbidity (Dhalwani et al., 2017), while self-reported activity showed no significant association with onset or progression (Ryan et al., 2018). Walking speed and grip strength measured physical function. Liu et al. (2023) examined transitions among adults initially free of three target cardiometabolic diseases. Mou et al. (2025) reported disease-count odds ratios, which do not quantify progression rates.

Higher activity was associated with lower mortality in adults with multimorbidity (Chudasama et al., 2019; Veronese et al., 2025). The adjusted mortality HR for the most versus least active group was 0.49 (95% CI 0.43–0.55) in Veronese et al. (2025). Chudasama et al. (2020) modelled life expectancy. Both Chudasama studies and Liu et al. (2023) used UK Biobank data.

Associations with physical and cognitive function varied by disease category, activity frequency, and intensity (Ojijieme et al., 2024). Disease indicators explained little variation in changes during the exercise intervention (Savikangas et al., 2024). Higher moderate-to-vigorous activity was associated with lower odds of anxiety symptoms, with no clear association for depressive symptoms (Schmidt et al., 2025). The association between light activity and depressive symptoms was weak, and the cross-sectional design precluded establishing temporal direction.

Both groups in Savikangas et al. (2024) exercised, precluding estimation of the effect of exercise relative to no exercise. In Skou et al. (2025), the combined exercise and self-management programme improved quality of life and self-rated health. The clinical relevance of the quality-of-life difference was unclear, and other secondary outcomes showed no significant between-group differences. Bricca et al. (2020) reported favourable effects of exercise therapy on quality of life, physical function, and depressive symptoms, with low-certainty evidence and inconsistent findings across outcomes.

Light-intensity activity may be relevant to some outcomes (Schmidt et al., 2025; Ojijieme et al., 2024), but the optimal dose remains uncertain. Skou et al. (2025) reported 36 versus 48 serious adverse events in the intervention and usual-care groups, respectively (p = 0.388). The analysis counted events, and safety equivalence remains uncertain. Savikangas et al. (2024) enrolled participants able to exercise safely, limiting applicability to patients with more severe conditions. Activity goals and programme selection should reflect patients' condition combinations, functional capacity, and exercise tolerance. A strength of this review was the separate interpretation of outcomes by baseline morbidity and by habitual activity or prescribed exercise.

Table 1
General characteristics of the included studies

Authors (year)	Country / setting	Study design	Data source	Sample size and age	Follow-up / study period
Dhalwani et al. (2017)	England	Longitudinal cohort study	ELSA, waves 4–6	5,476 adults aged ≥50 years	Three survey waves; 232,749 person-months of follow-up.
Ryan et al. (2018)	Ireland	Secondary analysis of a population-based longitudinal cohort	TILDA, waves 1 and 2	4,823 adults aged ≥50 years	2 years; waves identified in the article as 2010 and 2012.
Liu et al. (2023)	United Kingdom	Prospective cohort study	UK Biobank, linked to primary care, hospital and mortality records	359,773 participants aged 37–73 years; mean age 55.82 years	Recruitment in 2006–2010; follow-up until the relevant outcome, death or censoring. Overall follow-up duration not explicitly reported in the main text.
Mou et al. (2025)	China	Population-based longitudinal cohort study	CHARLS	6,244 participants; 19,498 observations	Five survey waves, 2011–2020.
Vancampfort et al. (2017)	46 low- and middle-income countries	Cross-sectional study	WHS	228,024 community-dwelling adults aged ≥18 years	Not applicable: cross-sectional analysis.
Ojijieme et al. (2024)	United States	Longitudinal cohort analysis	HRS	1,238 fully retired adults aged ≥50 years; 11,142 observations	16 years, 2004–2020.
Savikangas et al. (2024)	Finland; Jyväskylä	Exploratory post hoc analysis of an RCT	PASSWORD trial	314 physically inactive, community-dwelling adults aged 70–85 years	12-month exercise intervention; physical activity additionally assessed 1 year after the intervention.
Schmidt et al. (2025)	United States; Wisconsin	Cross-sectional study	SHOW	1,924 adults with valid accelerometer data; median age 55 years (IQR 41–66)	Not applicable: cross-sectional analysis.
Chudasama et al. (2019)	United Kingdom	Prospective cohort study	UK Biobank	491,939 participants, including 96,622 with multimorbidity	Median follow-up: 7.0 years (IQR 6.3–7.6).
Chudasama et al. (2020)	United Kingdom	Prospective cohort study	UK Biobank	480,940 participants aged 38–73 years; median age 58 years	Mean follow-up: 7 years (range 2–9); recruitment in 2006–2010 and follow-up until 2016.
Veronese et al. (2025)	28 countries, as reported in the article	Longitudinal cohort study	SHARE, waves 1–8	9,216 participants with multimorbidity; mean age 69 years (SD 10.1)	Reported as 12 years; the article also identifies the survey period as 2004–2020.
Skou et al. (2025)	Denmark	Pragmatic, multicentre, assessor-blinded RCT	MOBILIZE trial	228 adults with multimorbidity; 115 allocated to the intervention group and 113 to usual care	12-month follow-up; 12-week exercise therapy and self-management support intervention.

Note. CHARLS = China Health and Retirement Longitudinal Study; ELSA = English Longitudinal Study of Ageing; HRS = Health and Retirement Study; IQR = interquartile range; PASSWORD = Promoting Safe Walking among Older People; RCT = randomised controlled trial; *SD* = standard deviation; SHARE = Survey of Health, Ageing and Retirement in Europe; SHOW = Survey of the Health of Wisconsin; TILDA = The Irish Longitudinal Study on Ageing; WHS = World Health Survey. MOBILIZE is the trial name.

5.1. Limitations of the study

This review has several limitations. Selective inclusion and incomplete screening records limited coverage and reproducibility and may have introduced selection bias. Predominantly observational evidence limited causal inference because residual confounding and reverse causation remained possible despite adjustment and sensitivity analyses. Differences in multimorbidity definitions and ascertainment, baseline morbidity, activity measures and thresholds, follow-up, and outcomes limited comparability. Self-report may have introduced misclassification, and overlapping UK Biobank

Table 2
Multimorbidity definitions, ascertainment and baseline status

Authors (year)	Definition / scope	Ascertainment	Conditions included	Baseline / assessment status
Dhalwani et al. (2017)	Broad multimorbidity: ≥2 conditions.	Self-reported physician diagnoses.	CVD, metabolic, respiratory, musculoskeletal, neurological and sensory conditions, and cancer	All had 0–1 condition; incident multimorbidity assessed.
Ryan et al. (2018)	≥2 of 16 condition groups derived from 30 diagnoses; ≥3 also examined.	Participant-reported conditions in TILDA interviews.	CVD, metabolic, respiratory, hepatic, ocular, musculoskeletal, neurological, cognitive, psychological and gastrointestinal conditions, and cancer	Mixed: 2,588 (53.7%) had ≥2 conditions; 2,235 had 0–1. Onset and worsening assessed separately.
Liu et al. (2023)	Cardiometabolic multimorbidity: ≥2 of three diseases.	First-occurrence records integrating primary care, hospital, self-report and mortality data.	Type 2 diabetes, ischaemic heart disease and stroke	All free of these three diseases; other conditions permitted.
Mou et al. (2025)	Eleven physical diseases; count categories of 2, 3, 4 and ≥5, with one disease as reference.	Repeated self-reports.	11 cardiometabolic, respiratory, hepatic, renal, digestive and musculoskeletal conditions	Mixed morbidity status; disease counts assessed repeatedly.
Vancampfort et al. (2017)	Physical multimorbidity: ≥2 of nine conditions.	Diagnoses, symptoms, functional difficulties and interviewer observation.	Chronic back pain, angina, arthritis, asthma, diabetes, hearing and visual impairments, tuberculosis and edentulism	Mixed population; cross-sectional assessment.
Ojijieme et al. (2024)	Eight condition groups mapped to five classes; class presence required ≥1 constituent condition.	Self-reported physician diagnoses.	Hypertension, diabetes, non-skin cancer, chronic lung disease excluding asthma, heart problems, stroke/TIA, psychiatric problems and arthritis/rheumatism	≥2 conditions not required; disease classes and activity interactions assessed.
Savikangas et al. (2024)	Seventeen condition indicators analysed jointly; BMI included separately.	Self-reports verified by a physician against registry records; ICD-10 coding.	CVD, metabolic, respiratory, musculoskeletal, endocrine, urinary, renal, gastrointestinal and mental health conditions, and cancer	Mixed: 206 (66%) had ≥2 conditions. Physically inactive participants eligible for safe exercise.
Schmidt et al. (2025)	Physical multimorbidity: ≥2 of eight conditions.	Self-reported healthcare-provider diagnoses.	Cancer, hyperlipidaemia, diabetes, hypertension, coronary artery disease, heart failure, stroke and COPD	Mixed: 623 (32.4%) had multimorbidity; cross-sectional assessment.
Chudasama et al. (2019)	Broad multimorbidity: ≥2 of 36 physical and mental conditions.	Self-reported physician diagnoses at UK Biobank baseline.	36 physical and mental conditions	Mixed: 96,622 (19.6%) had multimorbidity; others had 0–1 condition.
Chudasama et al. (2020)	Broad multimorbidity: ≥2 of the same 36 conditions.	Self-reported physician diagnoses at UK Biobank baseline.	Same 36 conditions as in Chudasama et al. (2019)	Mixed: 93,746 (19.5%) had multimorbidity.
Veronese et al. (2025)	≥2 conditions; 15 stated, but 14 listed in Methods, with further reporting discrepancies.	Self-reported physician diagnoses in SHARE interviews.	CVD, metabolic, respiratory, gastrointestinal, neurological, ocular, affective and musculoskeletal disorders, and cancer	All 9,216 had multimorbidity: two conditions, 50.4%; three, 26.8%; >3, 22.8%.
Skou et al. (2025)	≥2 of six prespecified condition categories; additional conditions permitted.	Eligibility screening; activity impact assessed using the Bayliss Disease Burden measure.	Knee/hip osteoarthritis, COPD, heart disease (heart failure or coronary heart disease), hypertension, type 2 diabetes and depression	All had multimorbidity affecting daily activities and were eligible for safe exercise.

Note. BMI = body mass index; COPD = chronic obstructive pulmonary disease; ICD-10 = International Classification of Diseases, 10th Revision; SHARE = Survey of Health, Ageing and Retirement in Europe; TIA = transient ischaemic attack; TILDA = The Irish Longitudinal Study on Ageing.

samples limited the independence of findings. Both groups exercised in Savikangas et al. (2024), while Skou et al. (2025) combined exercise with self-management support, leaving the independent effect of exercise uncertain. Variation in activity dose and limited safety data prevented identification of an optimal regimen. The predominance of middle-aged and older adults and screening for safe exercise

Table 3

Physical activity assessment and characteristics of structured exercise programmes

Physical activity assessment

Authors (year)	Measure and timing	Activity type and intensity	Scoring and thresholds
Dhalwani et al. (2017)	ELSA self-report, each wave	Mild, moderate and vigorous	Frequency: >1×/week, 1×/week, 1–3×/month or hardly ever. Active: ≥1×/week at any intensity. Duration not used.
Ryan et al. (2018)	Short-form IPAQ	Walking, moderate and vigorous	Standard IPAQ categories: low, moderate and high.
Liu et al. (2023)	Short-form IPAQ, baseline	Moderate and vigorous	Volume: <600, 600–1,200 or >1,200 MET-min/week. Vigorous share of MVPA (MET-min): 0, >0 to 0.25, >0.25 to 0.50, >0.50 to 0.75, >0.75 to <1, or 1.
Mou et al. (2025)	IPAQ-based CHARLS items, repeated waves	Walking/light, moderate and vigorous (3.3, 4.0 and 8.0 METs, respectively)	Days/week with bouts ≥10 min. Duration estimated from intervals. Volume: <600, 600–3,000 or >3,000 MET-min/week.
Vancampfort et al. (2017)	IPAQ items, past week	Moderate and vigorous	Low activity (outcome): <150 min/week. Threshold met: ≥150 min/week.
Ojijieme et al. (2024)	HRS self-report, repeated waves	Light, moderate and vigorous, assessed separately	None, 1–3 days/month, 1×/week, >1×/week or daily. Duration unmeasured.
Savikangas et al. (2024)	Single self-report item, baseline and 6, 12 and 24 months	Daily movement to competitive sport and regular training	Ordinal score (0–6) combining activity type, frequency and perceived exertion.
Schmidt et al. (2025)	Hip-worn ActiGraph wGT3X-BT, 7 days during waking hours	Light activity and MVPA, classified by count thresholds	Valid wear: ≥10 h/day on ≥3 days. Associations per additional h/week. Guideline: ≥150 min moderate or ≥75 min vigorous/week, or equivalent.
Chudasama et al. (2019)	Leisure questionnaire (past 4 weeks), modified IPAQ (past 7 days) and wrist-worn Axivity AX3 (7 days, n = 95,616)	Leisure: walking, DIY/gardening, strenuous sport and other exercise. Total: walking, moderate and vigorous. Device: overall movement.	Self-report: <600, 600–<3,000 or ≥3,000 MET-min/week. Device: mean acceleration tertiles.
Chudasama et al. (2020)	Leisure questionnaire, baseline (past 4 weeks)	Leisure walking, heavy DIY/gardening, strenuous sport and other exercise	Regular activity: ≥500 MET-min/week. Analysed alone and in a composite lifestyle score.
Veronese et al. (2025)	Two SHARE self-report items	Vigorous and low/moderate activity	Weighted frequency score: very low (0–1), moderately low (2–3), moderately high (4–7) or high (8–9). Duration unmeasured.
Skou et al. (2025)	Axivity AX3, right thigh and non-dominant wrist, 7 days at baseline and 4 and 12 months	Steps and activity at light intensity or above (secondary outcomes)	Valid wear: ≥22 h/day on ≥3 weekdays and ≥1 weekend day. Outcomes: steps/day and active min/day.

Structured exercise programmes

Authors (year)	Exercise and delivery	Frequency and duration	Intensity and progression	Comparison
Savikangas et al. (2024)	Supervised strength/balance and walking/dynamic balance sessions. Home strength, balance and flexibility exercises.	12 months. Two supervised sessions/week (one of each type), plus home exercise 2–3×/week. Supervised walking: 10–20 min continuously. Additional goal: 150 min/week of moderate aerobic activity.	Walking: Borg RPE 13–14. Training loads and balance difficulty increased progressively.	Physical plus cognitive training vs physical training alone.
Skou et al. (2025)	Individualised, physiotherapist-supervised exercise plus self-management support. Sessions included warm-up, balance, strengthening, participant-selected strengthening, aerobic or functional activities, and cool-down.	12 weeks, twice weekly. 24 exercise sessions (~60 min each) and 24 self-management sessions (~30 min each).	Aerobic: Borg RPE 12–14. Strengthening and functional exercise: OMNI RPE 5–7. Difficulty adjusted to perceived exertion. Strengthening progressed from 2 × 10 to 3 × 12 repetitions.	Exercise plus self-management support and usual care vs usual care alone.

Note. CHARLS = China Health and Retirement Longitudinal Study, DIY = do-it-yourself, ELSA = English Longitudinal Study of Ageing, HRS = Health and Retirement Study, IPAQ = International Physical Activity Questionnaire, MET = metabolic equivalent of task, MET-min = metabolic equivalent minutes, MVPA = moderate-to-vigorous physical activity, RPE = rating of perceived exertion, SHARE = Survey of Health, Ageing and Retirement in Europe. Borg and OMNI are perceived exertion scales.

limited applicability to younger adults and those with more severe conditions.

6. Conclusions

Across 12 studies, higher physical activity was most consistently associated with lower mortality and longer modelled life expectancy in adults with multimorbidity. Findings for multimorbidity onset and progression, physical and cognitive function, and mental health were mixed. One trial found improved health-related quality of life with combined exercise and self-management support, although the clinical importance of the difference and the independent effect of exercise remain uncertain. The optimal activity type, frequency, duration and intensity remain unclear. Future studies should define baseline morbidity, use comparable activity and outcome measures, and report clinically meaningful benefits and adverse events.

Conflict of Interest

The authors declare no conflict of interest.

Ethics Approval

Not applicable. This study is a literature review and did not involve human participants, animals, or identifiable personal data.

Data Availability

Not applicable. No new data were generated or analysed in this study.

Trial Registration

Not applicable. This study was not a clinical trial and did not require registration.

Author Contributions

Conceptualization: SČ. Methodology: SČ, AL. Validation: SČ, AL. Formal analysis: SČ, AL. Investigation: SČ, AL. Data curation: SČ, AL. Writing – original draft: SČ, AL. Writing – review & editing: SČ, AL. Visualization: SČ. Supervision: SČ.

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