Supplementary File. Zangishei F, Rezvaniamin M, Salar A. Mapping the Evidence on Progressive Muscle Relaxation (PMR) for Health Outcomes in Older Adults: A Scoping Review. Jundishapur J Chronic Dis Care. 2026;15(4):e174315. Reference numbers are those of the article.

Supplementary Tables

Supplementary Table S1. Search Strategies

Table S1a. PubMed Search Strategy

#	Search String
1	"Muscle Relaxation" [Mesh] OR "Progressive Muscle Relaxation"[tiab] OR "progressive muscular relaxation"[tiab] OR "Jacobson relaxation"[tiab] OR "Jacobson's progressive relaxation"[tiab] OR "Jacobson's progressive muscle relaxation"[tiab] OR "JPMR"[tiab] OR "PMR"[tiab]
2	"Aged" [Mesh] OR "Aged, 80 and over"[Mesh] OR "Frail Elderly"[Mesh] OR elderly[tiab] OR "older adult"[tiab] OR geriatric[tiab] OR senior[tiab] OR "60 years and older"[tiab]
3	community[tiab] OR "nursing home"[tiab] OR hospital[tiab] OR "primary care"[tiab] OR "assisted living"[tiab] OR "long-term care"[tiab] OR "healthcare setting"[tiab]
4	#1 AND #2 AND #3
5	#4 AND (2015:2026[dp])
6	#5 AND (English[la] OR Persian[la])

Table S1b. Scopus Search Strategy

#	Search String
1	TITLE-ABS-KEY("progressive muscle relaxation" OR "progressive muscular relaxation" OR "Jacobson relaxation" OR "Jacobson's progressive relaxation" OR "Jacobson's progressive muscle relaxation" OR "JPMR" OR "PMR")
2	TITLE-ABS-KEY(eldery OR "older adult" OR geriatric OR senior OR "aged 60" OR "60 years and older")
3	TITLE-ABS-KEY(community OR "nursing home" OR hospital OR "primary care" OR "assisted living" OR "long-term care" OR "healthcare setting")
4	#1 AND #2 AND #3
5	#4 AND PUBYEAR > 2014 AND PUBYEAR < 2027
6	#5 AND (LANGUAGE(english) OR LANGUAGE(persian))

Table S1c. Web of Science Search Strategy

#	Search String
1	TS=('progressive muscle relaxation' OR "progressive muscular relaxation" OR "Jacobson relaxation" OR "Jacobson's progressive relaxation" OR "Jacobson's progressive muscle relaxation" OR "JPMR" OR "PMR")
2	TS=(eldery OR "older adult" OR geriatric OR senior OR "aged 60" OR "60 years and older")
3	TS=(community OR "nursing home" OR hospital OR "primary care" OR "assisted living" OR "long-term care" OR "healthcare setting")
4	#1 AND #2 AND #3
5	#4 AND PY=2015-2026
6	#5 AND (LA=English OR LA=Persian)

Table S1d. Cochrane Library Search Strategy

#	Search String
1	MeSH descriptor: [Muscle Relaxation] explode all trees OR ("progressive muscle relaxation" OR "progressive muscular relaxation" OR "Jacobson relaxation" OR "Jacobson's progressive relaxation" OR "Jacobson's progressive muscle relaxation" OR "JPMR" OR "PMR");ti,ab,kw

#	Search String
2	MeSH descriptor: [Aged] explode all trees OR (eldery OR "older adult" OR geriatric OR senior OR "aged 60" OR "60 years and older");ti,ab,kw
3	(community OR "nursing home" OR hospital OR "primary care" OR "assisted living" OR "long-term care" OR "healthcare setting");ti,ab,kw
4	#1 AND #2 AND #3
5	#4 with publication year from 2015 to 2026
6	#5 with language English or Persian

Table S1e. Google Scholar Search Strategy

#	Search String
1	"progressive muscle relaxation" OR "progressive muscular relaxation" OR "Jacobson relaxation" OR "JPMR" OR "PMR"
2	#1 AND (eldery OR "older adults" OR geriatric OR "aged 60")
3	#2 AND (community OR "nursing home" OR hospital OR "primary care" OR "assisted living")
4	#3 AND 2015..2026

Table S1f. SID (Scientific Information Database) Search Strategy

#	Search String
1	("PMR" OR "JPMR" OR "روش چاکوبسون" OR "آرام سازی پیشرونده" OR "آرام سازی عضلانی پیشرونده")
2	("سال و بالاتر" OR "سالمند" OR "olderly" OR "older adults")
3	#1 AND #2
4	#3 AND (1394:1405)

Table S1g. Magiran Search Strategy

#	Search String
1	("آرام سازی پیشرونده" OR "آرام سازی عضلانی پیشرونده" OR "روش چاکوبسون" OR "PMR")
2	("سال و بالاتر" OR "سالمند" OR "older adults")
3	#1 AND #2
4	#3 AND (1394:1405)

Supplementary Table S2. MMAT 2018 Criterion-Level Appraisal

Study ID (Reference)	Design	C1	C2	C3	C4	C5	Criterion-Level Concern
S01 (27)	Quasi-exp	Y	Y	Y	N	Y	C4: No control group
S02 (28)	N/R	Y	Y	Y	N	Y	C4: No blinding reported
S03 (6)	One-group pre/post	Y	Y	Y	N	Y	C4: No control group
S04 (13)	Quasi-exp	Y	Y	Y	N	Y	C4: No control group
S05 (29)	Two-group comparative	Y	Y	Y	N	Y	C4: No blinding reported
S06 (30)	One-group pre/post	Y	Y	Y	N	Y	C4: No control group
S07 (31)	N/R	Y	Y	Y	U	Y	C4: Baseline differences
S08 (32)	Quasi-exp	Y	Y	Y	N	Y	C4: No control group
S09 (7)	N/R	Y	Y	Y	U	Y	C4: Baseline differences in age
S10 (33)	Quasi-exp	Y	Y	Y	U	Y	C4: Baseline differences
S11 (19)	Quasi-exp	Y	Y	Y	N	Y	C4: Non-concurrent control
S12 (34)	Quasi-exp	Y	Y	Y	N	Y	C4: No control group

Study ID (Reference)	Design	C1	C2	C3	C4	C5	Criterion-Level Concern
S13 (24)	RCT	Y	Y	Y	N	Y	C4: No blinding reported
S14 (5)	Quasi-exp	Y	Y	Y	N	Y	C4: No control group
S15 (35)	Quasi-exp	Y	Y	Y	U	Y	C4: Baseline comparability not fully reported
S16 (26)	Experimental	Y	Y	Y	U	Y	C4: No control group
S17 (36)	Quasi-exp	Y	Y	Y	U	Y	C4: No control group
S18 (37)	Experimental	Y	Y	Y	N	Y	C4: No control group
S19 (38)	Pre-exp	Y	Y	Y	N	Y	C4: No control group
S20 (18)	Quasi-exp	Y	U	Y	N	Y	C2: Measurement not fully described; C4: No control group
S21 (10)	Pre-exp	Y	Y	Y	N	Y	C4: No control group
S22 (39)	Pre-exp	Y	Y	Y	N	Y	C4: No control group
S23 (40)	N/R	Y	Y	Y	N	Y	C4: No control group
S24 (41)	Pre-exp	Y	Y	Y	N	Y	C4: No control group
S25 (42)	Quasi-exp	Y	Y	Y	N	Y	C4: No control group
S26 (9)	Pre-exp	Y	Y	Y	N	Y	C4: No control group
S27 (17)	Quasi-exp	Y	Y	Y	Y	Y	All criteria met
S28 (8)	Pre/post	Y	Y	Y	U	Y	C4: No control group
S29 (43)	Pre-exp	Y	Y	Y	N	Y	C4: No control group
S30 (21)	RCT	Y	Y	Y	U	Y	C4: No blinding reported
S31 (44)	RCT	Y	Y	Y	U	Y	C4: No blinding reported
S32 (45)	Quasi-exp	Y	Y	Y	N	Y	C4: Confounders not addressed
S33 (46)	RCT	Y	Y	Y	U	Y	C4: No blinding reported
S34 (14)	Pre-exp	Y	Y	Y	N	Y	C4: No control group
S35 (4)	Pre-exp	Y	Y	Y	N	Y	C4: No control group
S36 (3)	Quasi-exp	Y	Y	Y	Y	Y	All criteria met
S37 (15)	Quasi-exp	Y	Y	Y	U	Y	C4: No control group
S38 (47)	N/R	Y	Y	Y	U	Y	C4: No control group
S39 (48)	Case study	Y	Y	Y	N	Y	C4: No control group
S40 (49)	Quasi-exp	Y	Y	Y	N	Y	C4: No control group
S41 (50)	Quasi-exp	Y	Y	Y	U	Y	C4: Confounders not addressed
S42 (51)	Pre-exp	Y	Y	Y	N	Y	C4: No control group
S43 (52)	Case study	Y	Y	Y	N	Y	C4: No control group
S44 (12)	Case study	Y	Y	Y	N	Y	C4: No control group
S45 (53)	Quasi-exp	Y	U	Y	U	Y	C2: Representativeness unclear; C4: Baseline differences

C1 = sampling strategy; C2 = representativeness; C3 = measurement; C4 = confounders; C5 = intervention administration/nonresponse bias. Y = Yes; N = No; U = Unclear; N/R = Not Reported. C4 = Yes indicates that confounders were adequately addressed; C4 = No indicates that confounders were not addressed; C4 = Unclear indicates insufficient information.

Supplementary Table S3. Master Dataset — Intervention/Comparator and Dose/Outcome Charting

Study ID	Intervention (as recorded)	PMR frequency	Session length	Intervention length	Muscle groups	Supervision / delivery	Outcome instrument	Assessment time	Follow-up	Adherence	Attrition	Adverse events
S01	PMR therapy	N/R	N/R	N/R	N/R	N/R	Anxiety scale	Pre/post	N/R	N/R	N/R	N/R
S02	Not reported	N/R	N/R	N/R	N/R	N/R	Not reported	N/R	N/R	N/R	N/R	N/R
S03	PMR therapy for 10 days	N/R	N/R	10 days	N/R	N/R	Zung's Self Rating Anxiety Scale	Pre/post	N/R	N/R	N/R	N/R
S04	JPMR once weekly for 8 weeks	once weekly	N/R	8 weeks	N/R	N/R	GAI and Oxford Happiness Questionnaire	Pre/post	N/R	N/R	N/R	N/R
S05	taVNS vs Jacobson's PMR	N/R	30 min	4 weeks	N/R	N/R	Anxiety and sleep disturbance measures	N/R	N/R	N/R	N/R	N/R
S06	JPMRT; exact dose not reported	N/R	N/R	N/R	N/R	N/R	Modified Hamilton Anxiety Scale	Pre/post	N/R	N/R	N/R	N/R
S07	Jacobson's progressive relaxation	N/R	N/R	N/R	N/R	N/R	Hamilton Anxiety Scale	Pre/post	N/R	N/R	N/R	N/R
S08	PMR technique	N/R	N/R	N/R	N/R	N/R	HARS and GDS	Pre/post	N/R	N/R	N/R	N/R
S09	PMR	N/R	N/R	N/R	N/R	N/R	Beck Anxiety Inventory, PSS	N/R	N/R	N/R	N/R	N/R
S10	PMR technique	N/R	N/R	N/R	N/R	N/R	Hamilton Anxiety Scale	N/R	N/R	N/R	N/R	N/R
S11	JPMR + deep breathing	N/R	N/R	N/R	N/R	N/R	GAI, K-10, PSQI	N/R	N/R	N/R	N/R	N/R
S12	PMR + deep breathing	N/R	N/R	N/R	N/R	N/R	DASS	Pre/post	N/R	N/R	N/R	N/R
S13	PMR 28-min, 3×/week, 8 weeks	3×/week	28 min	8 weeks	N/R	N/R	GDS-15, ASADE	N/R	N/R	N/R	N/R	N/R
S14	Relaxation exercises 2×/day, 30 days	2×/day	N/R	30 days	N/R	N/R	GDS	N/R	N/R	N/R	N/R	N/R
S15	PMR + activity schedule	N/R	N/R	N/R	N/R	N/R	GDS, ADL checklist	Pre/post	N/R	N/R	N/R	N/R
S16	Jacobson PMR 5–6 days/week, 12 weeks	5–6 days/week	N/R	12 weeks	N/R	N/R	GDS, Q-LES-Q	Pre/post	N/R	N/R	N/R	N/R
S17	Jacobson's PMR 2×/day, 21 days	2×/day	N/R	21 days	N/R	N/R	PSQI, HDS	Pre/post	day 28	N/R	N/R	N/R
S18	PMR + deep breathing, 12 weeks	N/R	N/R	12 weeks	N/R	N/R	Athens Insomnia Scale	N/R	N/R	N/R	N/R	N/R
S19	JPMR for 5 days	N/R	N/R	5 days	N/R	N/R	PSQI	Pre/post	N/R	N/R	N/R	N/R
S20	Jacobson's PMR	N/R	N/R	N/R	N/R	N/R	Fatigue and sleep quality	Pre/post	N/R	N/R	N/R	N/R
S21	PMR	N/R	N/R	N/R	N/R	N/R	Insomnia questionnaire	Pre/post	N/R	N/R	N/R	N/R
S22	PMR therapy	N/R	N/R	N/R	N/R	N/R	Observation/interview	Pre/post	N/R	N/R	N/R	N/R
S23	SRT vs PMR	N/R	N/R	N/R	N/R	N/R	MMSE	N/R	N/R	N/R	N/R	N/R
S24	PMR therapy	N/R	N/R	N/R	N/R	N/R	PSQI	Pre/post	N/R	N/R	N/R	N/R
S25	PMR therapy	N/R	N/R	N/R	N/R	N/R	PSQI	Pre/post	N/R	N/R	N/R	N/R
S26	Progressive relaxation therapy	N/R	N/R	N/R	N/R	N/R	Insomnia questionnaire	Pre/post	N/R	N/R	N/R	N/R
S27	Laughter therapy vs PMR	N/R	N/R	N/R	N/R	N/R	ISI	Pre/post	N/R	N/R	N/R	N/R
S28	PMR	N/R	N/R	N/R	N/R	N/R	PSQI	Pre/post	N/R	N/R	N/R	N/R
S29	PMR	N/R	N/R	N/R	N/R	N/R	PSQI	Pre/post	N/R	N/R	N/R	N/R
S30	PMR exercises	N/R	N/R	8 weeks	N/R	N/R	ASADE, NHP	N/R	N/R	N/R	N/R	N/R
S31	PMR + guided imagery + deep breathing	N/R	N/R	N/R	N/R	N/R	EORTC QLQ-C30	N/R	N/R	N/R	N/R	N/R
S32	PMR 45 min, 3 days/week, 3 months	3 days/week	45 min	3 months	N/R	N/R	Not reported	N/R	N/R	N/R	N/R	N/R

Study ID	Intervention (as recorded)	PMR frequency	Session length	Intervention length	Muscle groups	Supervision / delivery	Outcome instrument	Assessment time	Follow-up	Adherence	Attrition	Adverse events
S33	PMR 3 days/week, 3 months (36 sessions)	3 days/week	N/R	3 months	N/R	N/R	SF-36	N/R	N/R	N/R	N/R	N/R
S34	PMR, 1–5 September 2024	N/R	N/R	5 days	N/R	N/R	SOPs and observation	Pre/post	N/R	N/R	N/R	N/R
S35	PMR 3 sessions/week, 10–15 min	3 sessions/week	10–15 min	1 week	N/R	N/R	Sphygmomanometer	Pre/post	N/R	N/R	N/R	N/R
S36	PMR technique	N/R	N/R	N/R	N/R	N/R	BP measurement	Pre/post	N/R	N/R	N/R	N/R
S37	PMR	N/R	N/R	N/R	N/R	N/R	Observation, sphygmomanometer	Pre/post	N/R	N/R	N/R	N/R
S38	PMR therapy	N/R	N/R	N/R	N/R	N/R	Not reported	N/R	N/R	N/R	N/R	N/R
S39	PMR 15 min, 3 days	N/R	15 min	3 days	N/R	N/R	Sphygmomanometer	N/R	N/R	N/R	N/R	N/R
S40	Warm-water foot soak + PMR	N/R	N/R	N/R	N/R	N/R	Observation, sphygmomanometer	Pre/post	N/R	N/R	N/R	N/R
S41	PMR + music therapy (RESIK)	N/R	N/R	N/R	N/R	N/R	BP measurement	N/R	N/R	N/R	N/R	N/R
S42	PMR training	N/R	N/R	N/R	N/R	N/R	Barthel index	Pre/post	N/R	N/R	N/R	N/R
S43	PMR for chronic pain	N/R	N/R	7 days	N/R	N/R	NRS, BP measurement	N/R	N/R	N/R	N/R	N/R
S44	PMR for 6 consecutive days	N/R	N/R	6 days	N/R	N/R	BP and pain scale	N/R	N/R	N/R	N/R	N/R
S45	PMR 10 sessions, 2×/week, 5 weeks	2×/week	N/R	5 weeks	N/R	N/R	GAI	Pre/post	N/R	N/R	N/R	N/R

N/R = Not Reported or not structured in the audited master database; no value was inferred. Adherence, attrition, and adverse events were not structured variables in the master database.