Additional File 2: Search Strategy

**Final Search Strategies for MEDLINE, AMED, EMBASE, and CINAHL**

All search strategies were reviewed and approved by our supervisors as well as two Health Science Librarians, Ms. Neera Bhatnagar and Mr. Jack Young.

**Database:** MEDLINE

**Date of search:** February 18th, 2021

**Limits:** No limits were applied to this search strategy.

**Operators**: all mesh headings and key words under the same construct (i.e., physical activity) were combined with the operator “OR” and all constructs were combined with the operator “AND”.

**Number of studies retrieved:** 7,377

|  |  |  |
| --- | --- | --- |
| Construct | Mesh Headings  | Key words |
| Physical Activity | Exercise (exp)Exercise therapy (exp)Recreation (exp)Recreation therapy (exp)Motor activity (exp)Movement (exp)Sports (exp)Sports equipment (exp)Activities of daily living (exp)Physical Fitness (exp)Walking (exp)Exercise movement techniques (exp)Physical endurance (exp) | Abdominal exercis\*Activit\* of daily living Aerobic exercis\*Anaerobic exercis\*Arm exercis\*Aquatic exercis\*Breathing exercis\*Cardiorespiratory fitnessClosed kinetic chain exercis\*Danc\*Dynamic exercis\*Exercis\*Exercise and fitness equipmentExercis\* positionExercis\* intensity Exercis\* therapyFitness Group exercis\*Isokinetic exercis\*Isotonic exercis\*Isometric exercis\*Kegel exercis\*Leg exercis\*Moderate-vigorous physical activ\*Motor activit\*Movement techniqu\* Movement Muscle exercis\*Open kinetic chain exercis\*Physical fit\*Physical activ\*Plyometric\*RecreationResistance trainingSport\*Sport\*equipmentStatic exercis\*Stretching exercis\*Swim\*Treadmill exercis\*Therapeutic exercis\*Walk\*Warm-up exercis\* |
| Co-design | Community-based participatory research (exp)Patient Participation (exp)Community participation (exp) | Action researchAdvisoryCo-creat\*Cocreat\*Co-designCodesignCo-produc\*Coproduc\*Co-evaluat\*Coevaluat\*Co-decision\*Codecision\*Co-method\*Community-based participatory researchCommunity participationEngagement Participatory designParticipatory researchParticipatory health researchPatient participationPublic and patient involvementUser involvement |
| Older adults | Aged (exp)Aging (exp) | AgedAged individual\*Aged hospital patient\*Aged patient\*Aged worker\*Age 60 Age 65Age 70Age 75Age 80Aging adult\*Elder\*Frail elderlyGeriatric\*Late lifeMaster\* athlete\*Old\* adult\*Old\* patient\*Old\* peopleOld\* veteran\*Senior\*Very elderl\*60 and over |

**Database:** AMED

**Date of search:** February 18th, 2021

**Limits:** No limits were applied to this search strategy.

**Operators**: all mesh headings and key words under the same construct (i.e., physical activity) were combined with the operator “OR” and all constructs were combined with the operator “AND”.

**Number of studies retrieved:** 280

|  |  |  |
| --- | --- | --- |
| Construct | Subject Heading | Key words |
| Physical Activity | Exercise (exp)Exercise therapy (exp)Exercise movement techniques (exp)Recreation (exp)Motor activity (exp)Movement (exp)Sports (exp)Sports equipment (exp)Activities of daily living (exp)Physical Fitness (exp)Walking (exp)Physical endurance (exp)Rehabilitation (exp) | Abdominal exercis\*Activit\* of daily living Aerobic exercis\*Anaerobic exercis\*Arm exercis\*Aquatic exercis\*Breathing exercis\*Cardiorespiratory fitnessClosed kinetic chain exercis\*Danc\*Dynamic exercis\*Exercis\*Exercise and fitness equipmentExercis\* positionExercis\* intensity Exercis\* therapyFitness Group exercis\*Isokinetic exercis\*Isotonic exercis\*Isometric exercis\*Kegel exercis\*Leg exercis\*Moderate to vigorous physical activ\*Motor activit\*Movement techniqu\* Movement Muscle exercis\*Open kinetic chain exercis\*Physical fit\*Physical activ\*Plyometric\*RecreationResistance trainingSport\*Sport\* equipmentStatic exercis\*Stretching exercis\*Swim\*Treadmill exercis\*Therapeutic exercis\*Walk\*Warm-up exercis\* |
| Co-design | Patient Participation (exp) | Action researchAdvisoryCo-creat\*Cocreat\*Co-designCodesignCo-produc\*Coproduc\*Co-method\*Community-based participatory researchCommunity participationEngagement Participatory designParticipatory researchPatient participationPublic and patient involvementUser involvementEnd-user involvement |
| Older adults | Aged (exp)Aging (exp)Frail elderly (exp)Geriatrics (exp) | AgedAged individual\*Aged hospital patient\*Aged patient\*Aged worker\*Age 60 Age 65Age 70Age 75Age 80Aging adult\*Elder\*Frail elderlyGeriatric\*Late lifeMaster\* athlete\*Old\* adult\*Old\* patient\*Old\* peopleOld\* veteran\*Senior\*Very elder\*60 and over |

**Database:** EMBASE

**Date of search:** February 18th, 2021

**Limits:** No limits were applied to this search strategy.

**Operators**: all mesh headings and key words under the same construct (i.e., physical activity) were combined with the operator “OR” and all constructs were combined with the operator “AND”.

**Number of studies retrieved:** 5,944

|  |  |  |
| --- | --- | --- |
| Construct | Mesh Headings  | Key words |
| Physical Activity | aerobic exercise (exp)breathing exercise (exp)exercise (exp)isometric exercise (exp)muscle exercise (exp)anaerobic exercise (exp)aquatic exercise (exp)arm exercise (exp)closed kinetic chain exercise (exp)dynamic exercise (exp)“exercise and fitness equipment” (exp)isokinetic exercise (exp)isotonic exercise (exp)leg exercise (exp)open kinetic chain exercise (exp)static exercise (exp)stretching exercise (exp)treadmill exercise (exp)physical activity (exp)walking (exp)swimming (exp)dancing (exp)sport (exp)fitness (exp)cardiorespiratory fitness (exp) | Aerobic exercis\*Breathing exercis\*Isometric exercis\*Muscle exercis\*Anaerobic exercis\*Aquatic exercis\*Arm exercis\*Closed kinetic chain exercis\*Dynamic exercis\*Exercise and fitness equipmentIsokinetic exercis\*Isotonic exercis\*Leg exercis\*Open kinetic chain exercis\*Static exercis\*Stretching exercis\*Treadmill exercis\*walk\* swim\*activit\* of daily livingdanc\*sport\*FitnessCardiorespiratory fitnessMovement techniquesPhysical activ\*Exercis\*Physical fit\*Moderate-vigorous physical activ\*resistance trainingexercis\* position\* |
| older adults | aged (exp)aged hospital patient (exp)aged worker (exp)geriatrics (exp)very elderly (exp) | Aged Aged hospital patient\*Aged workerOld\* adult\*Elder\*Senior\*Master\* athlete\*60 and overaged patient\*aged individual\*old\* patient\*old\* peopleold\* veteran\*geriatric\*Very elderlyage 60 age 65age 70age 75age 80late lifeFrail elderlyOlder adult\*elderlyaging adult\*60 and over |
| co-design  | participatory research (exp)patient participation (exp)community participation (exp) | Participatory research Community based participatory researchPatient participationCommunity participationCo-designCodesignCo-creat\*Co-produc\*Coproduc\*Co-decision\*Codecision\*Participatory designParticipatory researchParticipatory health researchPublic and patient involvementAction researchEngagement AdvisoryUser involvementGenerative design researchScandinavian Design ResearchCommunity-based participatory research |

**Database:** CINAHL

**Date of search:** February 18th, 2021

**Limits:** No limits were applied to this search strategy.

**Operators**: all mesh headings and key words under the same construct (i.e., physical activity) were combined with the operator “OR” and all constructs were combined with the operator “AND”.

**Number of studies retrieved:** 2,452

|  |  |  |
| --- | --- | --- |
| Construct | MESH terms | Key words |
| Physical Activity | Physical activity (exp)Exercise+ (exp)resistance training (exp)exercise positions+ (exp)abdominal exercises (exp)therapeutic exercise+ (exp)warm-up exercise+ (exp)Recovery, exercise (exp)group exercise (exp)sport specific training (exp)kegel exercises (exp)exercise intensity (exp)open kinetic chain exercises (exp)plyometrics (exp) | physical activit\*exercis\*resistance trainingexercis\* position\*Abdominal exercis\*Therapeutic exercis\*Warm-up exercis\*exercis\* recoveryGroup exercis\*Kegel exercis\*Sport specific trainingexercis\* intensityOpen kinetic chain exercis\*plyometricPhysical fit\*Moderate-vigorous physical activ\*Walk\*Swim\*Activit\* of daily living Danc\*Sport\*Fitness Movement techniques Exercise therapy RecreationMotor activityMovementAerobic exercis\*Breathing exercis\*Isometric exercis\*Muscle exercis\*Anaerobic exercis\*Aquatic exercis\*Arm exercis\*Closed kinetic chain exercis\*Dynamic exercis\*Isokinetic exercis\*Isotonic exercis\*Leg exercis\*Static exercis\*Stretching exercis\*Treadmill exercis\*Cardiorespiratory fitness |
| Co-design | Action research (exp) | co-designcodesignco-creat\*cocreat\*co-produc\*coproduc\*co-evaluat\*coevaluat\*co-decisioncodecisionparticipatory designparticipatory researchParticipatory health researchPublic and patient involvementAction researchPatient participationUser involvementCommunity participationEngagementAdvisoryGenerative design researchScandinavian Design ResearchCommunity based participatory research |
| Older adults | Frail elderly (exp)aged+ (exp)aged, 80 and over+ (exp)aged, hospitalized (exp) | frail elderlyolder adult\*geriatric\*agedsenior\*elderlyaging adult\*Old\* adult\*Elder\*Master\* athlete\*60 and overaged patient\*aged individual\*old\* patient\*old\* peopleold\* veteran\*age 60age 65age 70age 75age 80late lifeAged hospital patient\*Aged workerVery elderly  |