<u>Research question 2: (implementation, qualitative research)</u>: What are the factors influencing implementation (outcome) of a first aid training (intervention) to different target groups (elderly, disabled, workplace, children,...) (population)?

Selection criteria

Population: included: specific target groups, including elderly, disabled, employees, children, rurally isolated people, sports, unpaid carers, people at risk of a natural disaster, parents, refugees, learner drivers, drug and alcohol addiction, wilderness, conflict, homeless, prisoners, social deprivation, ethnic minorities, unemployed seeking employment, intergenerational learning... excluded: general population (if no subgroup analyses for specific target groups are available) and health professionals **Intervention**: included: first aid training in any format (first aid, resuscitation, water safety education); excluded: general health training, any other form of health promotion

Outcome: included: perceptions, experiences, opinions, or viewpoints of trainers or learners concerning factors (barriers/facilitators) influencing implementation (e.g. using learner-centred approaches, content, coaching, length and modality of resources used, adaptations based on relevance and needs of learners,...)

Study design: all qualitative study designs addressing factors influencing implementation of first aid training courses. This includes for example grounded theory, case studies, phenomenological studies, ethnographic research, action research and thematic approaches to qualitative data analysis. The following types of studies were excluded: studies that did not use formal qualitative research study designs (e.g. surveys) or data collection techniques (e.g. interviews, focus group discussions, observations), and purely descriptive studies such as editorials and opinion pieces.

Search strategy PubMed:

"First aid" [Mesh] OR "Emergency Treatment" [Mesh:NoExp] OR "Emergency Medical Services" [Mesh:NoExp] OR "first aid" [TIAB] OR "first response" [TIAB] OR "prehospital care" [TIAB] OR "prehospital management" [TIAB] OR "prehospital treatment" [TIAB] OR "prehospital emergency medical care" [TIAB] OR "emergency care" [TIAB] OR "critical care" [TIAB] OR "acute management" [TIAB] OR "immediate care" [TIAB] OR "helping behavior" [TIAB] OR "helping behaviour" [TIAB] OR "basic life support" [TIAB] OR BLS[TIAB] OR "cardiopulmonary resuscitation" [Mesh:NoExp] OR "resuscitation" [TIAB] OR CPR[TIAB] OR "defibrillators" [Mesh:NoExp] OR "automated external defibrillator" [TIAB] OR AED [TIAB] OR (bystander [TIAB] AND help* [TIAB]) OR "Drowning [Mesh] OR drowning [TIAB] OR "water safety" [TIAB] OR "water rescue" [TIAB] OR lifeguard* [TIAB] AND

"Health Education" [Mesh:NoExp] OR "Educational Status" [Mesh] OR educat* [TIAB] OR train* [TIAB] OR learn* [TIAB] OR course* [TIAB] OR program [TIAB] OR programme [TIAB] OR curriculum [TIAB] OR curricula [TIAB] OR didactic* [TIAB] OR "teaching" [Mesh] OR teach* [TIAB] OR instruct* [TIAB] OR certificat* [TIAB]

AND

classroom[TIAB] OR webbased[TIAB] OR web-based[TIAB] OR online[TIAB] OR on-line[TIAB] OR casebased[TIAB] OR blended[TIAB] OR video[TIAB] OR photograph*[TIAB] OR animat*[TIAB] OR film[TIAB] OR "face-to-face"[TIAB] OR "scenario"[TIAB] OR experiential[TIAB] OR practical[TIAB] OR "role play"[TIAB] OR quiz*[TIAB] OR activit*[TIAB] OR "multiple choice"[TIAB] OR digital[TIAB] OR virtual[TIAB] OR gamification[TIAB] OR game[TIAB] OR media[TIAB] OR television[TIAB] OR radio[TIAB] OR TV[TIAB] OR press[TIAB] OR newspaper*[TIAB] OR technology[TIAB] OR peer[TIAB] OR mobile[TIAB] OR "e-learning"[TIAB] OR "cell phone"[TIAB] OR application[TIAB] OR app[TIAB] OR micro learn*[TIAB] OR social learn*[TIAB] OR barrier*[TIAB] OR facilitator*[TIAB] OR implement*[TIAB] OR "Health Plan Implementation"[Mesh] OR "Implementation Science"[Mesh]

AND

"Qualitative Research" [Mesh] OR "Interviews as Topic" [Mesh] OR "Focus Groups" [Mesh] OR "Narration" [Mesh] OR Interview* [TIAB] OR experience* [TIAB] OR qualitative [TIAB] OR ((semi-structured [TIAB] OR semistructured [TIAB] OR unstructured [TIAB] OR informal [TIAB] or in-depth [TIAB] OR indepth [TIAB] OR face-to-face [TIAB] OR structured [TIAB] OR guide [TIAB]) AND (interview* [TIAB] OR discussion* [TIAB] OR questionnaire* [TIAB])) OR focus group* [TIAB] OR ethnograph* [TIAB] OR fieldwork [TIAB] OR "field work" [TIAB] OR "key informant" [TIAB]

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Search strategy for copy-paste in Pubmed:

("First aid" [Mesh] OR "Emergency Treatment" [Mesh: NoExp] OR "Emergency Medical Services"[Mesh:NoExp] OR "first aid"[TIAB] OR "first response"[TIAB] OR "prehospital care"[TIAB] OR 'prehospital management"[TIAB] OR "prehospital treatment"[TIAB] OR "prehospital emergency medical care"[TIAB] OR "emergency care"[TIAB] OR "critical care"[TIAB] OR "acute management"[TIAB] OR immediate care"[TIAB] OR "helping behavior"[TIAB] OR "helping behaviour"[TIAB] OR "basic life" support"[TIAB] OR BLS[TIAB] OR "cardiopulmonary resuscitation" [Mesh:NoExp] OR "resuscitation"[TIAB] OR CPR[TIAB] OR "defibrillators"[Mesh:NoExp] OR "automated external defibrillator"[TIAB] OR AED[TIAB] OR (bystander[TIAB] AND help*[TIAB]) OR "Drowning"[Mesh] OR drowning[TIAB] OR "water safety"[TIAB] OR "water rescue"[TIAB] OR lifeguard*[TIAB]) AND ("Health Education" [Mesh: NoExp] OR "Educational Status" [Mesh] OR educat* [TIAB] OR train* [TIAB] OR learn*[TIAB] OR course*[TIAB] OR program[TIAB] OR programme[TIAB] OR curriculum[TIAB] OR curricula[TIAB] OR didactic*[TIAB] OR "teaching" [Mesh] OR teach*[TIAB] OR instruct*[TIAB] OR certificat*[TIAB]) AND (classroom[TIAB] OR webbased[TIAB] OR web-based[TIAB] OR online[TIAB] OR on-line[TIAB] OR casebased[TIAB] OR blended[TIAB] OR video[TIAB] OR photograph*[TIAB] OR animat*[TIAB] OR film[TIAB] OR "face-to-face" [TIAB] OR "scenario" [TIAB] OR experiential [TIAB] OR practical [TIAB] OR "role play" [TIAB] OR quiz*[TIAB] OR activit*[TIAB] OR "multiple choice" [TIAB] OR digital[TIAB] OR virtual[TIAB] OR gamification[TIAB] OR game[TIAB] OR media[TIAB] OR television[TIAB] OR radio[TIAB] OR TV[TIAB] OR press[TIAB] OR newspaper*[TIAB] OR technology[TIAB] OR peer[TIAB] OR mobile[TIAB] OR "e-learning"[TIAB] OR "cell phone"[TIAB] OR application[TIAB] OR app[TIAB] OR micro learn*[TIAB] OR social learn*[TIAB] OR barrier*[TIAB] OR facilitator*[TIAB] OR implement*[TIAB] OR "Health Plan Implementation"[Mesh] OR "Implementation Science"[Mesh]) AND ("Qualitative Research"[Mesh] OR "Interviews as Topic"[Mesh] OR "Focus Groups"[Mesh] OR "Narration"[Mesh] OR Interview*[TIAB] OR experience*[TIAB] OR qualitative[TIAB] OR ((semi-structured[TIAB] OR semistructured[TIAB] OR unstructured[TIAB] OR informal[TIAB] or in-depth[TIAB] OR indepth[TIAB] OR face-to-face[TIAB] OR structured[TIAB] OR guide[TIAB]) AND (interview*[TIAB] OR discussion*[TIAB] OR questionnaire*[TIAB])) OR focus group*[TIAB] OR ethnograph*[TIAB] OR fieldwork[TIAB] OR "field work"[TIAB] OR "key informant"[TIAB])