

Quality of professional life in firefighters: a scope review protocol

Qualidade de vida profissional em bombeiros: um protocolo de revisão de escopo

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Submission: 07/24/2023

Approved: 11/13/2023

ABSTRACT

Objective: To map trends in the use of Professional Quality of Life (PROQOL) in firefighters. **Method:** The methodology of Joanna Briggs Institute (JBI) will be applied for scope reviews. It will follow guidelines from Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-SCR). Research was carried out on the Open Science Framework (OSF), International PROSPECTIVE Register of Systematic Reviews (PROSPERO), Cochrane Library, Epistemonikos, and on the open access online repository (FIGSHARE), to identify identical articles, as this original work was not found. The basis which will be included in this review: Excerpta Medica dataBASE (EMBASE), SCOPUS, Medical Literature Analysis and Retrieval System on Line (PubMed - MEDLINE), Science Direct, PsycInfo da American Psychological Association (APA), Google Scholar, Cumulative Index to Nursing and Allied Health Literature (CINAHL), as well as, Theses, Dissertations, Articles of Government and Fire Sites. Two reviewers will select the articles independently, and without consensus a third reviewer will decide whether to include or exclude the study. The survey was registered on the OSF website platform, and it will be one of the most comprehensive studies on the use of this scale on Firefighters.

Descriptors: Firefighters; Quality of Life; Rescue Personnel.

RESUMO

Objetivo: Mapear tendências de utilização do *Professional quality of life* (PROQOL) em bombeiros. **Método:** Será aplicada a metodologia do *Joanna Briggs Institute* (JBI) para revisões de escopo. Seguirá diretrizes do *Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews* (PRISMA-ScR). Realizou-se pesquisa nas plataformas do *Open Science Framework* (OSF), *International Prospective Register of Systematic Reviews* (PROSPERO), *Cochrane Library*, *Epistemonikos*, e no repositório online de acesso aberto (FIGSHARE), para identificar artigos idênticos, como não foi encontrado considera-se este trabalho original. Serão incluídas nesta revisão as bases: *Excerpta Medica dataBASE* (EMBASE), SCOPUS, *Medical Literature Analysis and Retrieval System on Line* (PubMed - MEDLINE), *Science Direct*, *PsycInfo* da *American Psychological Association* (APA), *Google Scholar*, *Cumulative Index to Nursing and Allied Health Literature* (CINAHL), bem como, Teses, Dissertações, artigos de sites governamentais e de bombeiros. Dois revisores selecionarão os artigos de maneira independente, não havendo consenso um terceiro revisor decidirá pela inclusão ou exclusão do estudo. O levantamento foi registrado na plataforma OSF *website*, e será um dos estudos mais abrangentes sobre a utilização dessa escala em Bombeiros.

Descritores: Bombeiros; Qualidade de Vida; Equipe de Busca e Resg

INTRODUCTION

The Professional Quality of Life (PROQOL) can be understood as the result of the emotional and affective involvement that a help professional develops from the joy of providing help to someone, or by the suffering felt, by sharing the pain of those whom he helped⁽¹⁻⁴⁾.

In the development of this construct a theoretical model was created composed of two poles: a positive defined as satisfaction by compassion, compassion satisfaction (CS), and a negative one called fatigue by compassion, compassion fatigue (CF). The first pole is characterized by the feeling of pleasure in the work provided to others, referring also to the feeling of reward experienced when realizing that his or her work makes a difference to the service he or she performs⁽¹⁻⁴⁾. The second pole consists of two subcomponents: Burnout (BO), characterized by a context of emotional exhaustion, lack of energy and discouragement⁽⁵⁾, and Secondary Traumatic Stress, secondary traumatic stress (STS), defined as, the development of a feeling of fear, suffering and trauma resulting from previous care to a traumatized person⁽¹⁾.

CS can promote the well-being of the professional, and this sensation can be stimulated by strengthening the protective factors of PROQOL, described in the literature as: the empathic relationship between the professional and the patient/family; the emotional characteristics of the individual; the environment of the work; the support of the peers; the development of coping mechanisms and resilience; the stimulation of the practice of self-care; the balance between work and personal life; the encouragement of self-knowledge. CS can also be considered as a form of recovery capital, providing greater coping capacity and lower risk to a possible secondary trauma^(4,6-9).

CF is considered the negative pole of the model and has two subcomponents the BO and STS, being considered as the imbalance and preponderance of negative feelings in relation to the work developed. Some professions are the most affected, such as police, firefighters, nurses, doctors, psychologists, and social workers^(4,10-11).

It is verified in the literature that since its creation in 1990, the PROQOL construct has already been used in more than 1000 publications and its scale adapted to 28 countries⁽¹²⁾, in addition, this construct has evolved since the initial purpose of Charles Figley⁽¹⁻²⁾, expanding with the

vision of Beth Hudnall Stamm^(3,4), and by the cultural adaptations, such as the Brazilian version⁽¹³⁻¹⁴⁾. In this context, little is known about the characteristics of PROQOL among firefighter rescuers, which justifies the realization of this scope review, these professionals face in their daily lives inhospitable working environments that are potential sources of high stress and that can impact the quality of professional life triggering BO; the STS, and the CS reduction⁽¹⁵⁻¹⁶⁾.

There are no similar survey records, as preliminary research in the databases: International Prospective Register of Systematic Reviews (PROSPERO), Medical Literature Analysis and Retrieval System on Line (PubMed-MEDLINE), Cochrane Library, Joanna Briggs Institute (JBI), Epistemonikos, American Psychological Association (APA) PsycInfo. This protocol has been registered in the Open Science Framework (OSF) website through URL <https://doi.org/10.17605/OSF.IO/JBEWN>, and will be one of the most comprehensive studies on the use of this Fire Scale.

METHOD

Research question

What are the main features of using PROQOL in Firemen?

Eligibility criteria

Eligibility criteria were developed using the PCC mnemonic (population, concept and context), according to the search strategy.

Population

Records of studies on PROQOL performed with operational firefighters.

Concept

Studies and publications about PROQOL and its CS and CF subcomponents (BO, STS).

Context

Studies must have been carried out in the context of operational activities.

Stages

This research methodology can be developed in three stages.

First step

The first step will identify the main keywords/descriptors (Figure 1).

| Descriptors | Terms of entry |
|------------------------------|---|
| Quality of professional life | "professional quality of life"[All Fields] |
| Firefighters | "Firefighters"[MeSH Terms] AND "firefighters"[All Fields] OR "Firefighters"[MeSH Terms] OR "Firefighters"[All Fields] OR "firefighter"[All Fields] OR "firefighting"[All Fields]) AND "Firefighters"[MeSH Terms] OR "Firefighters"[All Fields] OR ("fire"[All Fields]) OR "fire and rescue personnel"[All Fields] "Firefighters"[MeSH Terms] OR "Firefighters"[All Fields] OR "fire"[All Fields] AND "fighters"[All Fields] OR "fire fighters"[All Fields] "Firefighters"[MeSH Terms] OR "Firefighters"[All Fields] OR ("fire"[All Fields] AND "fighter"[All Fields]) OR "fire fighter"[All Fields] |
| Search and rescue team | "rescuer"[All Fields] OR "rescuers"[All Fields] OR "rescuers"[All Fields] OR "first responder"[All Fields]"rescue"[All Fields] AND "personnel"[All Fields] |

Figure 1 – Definition of keywords. Manaus, AM, Brazil, 2023

Second stage

The second stage consisted of the definition of the search strategy from the Preferred Reporting Items tool for Systematic Reviews and

Meta-Analyses extension for Scoping Reviews (PRISMA-SCR)⁽¹⁷⁻²⁰⁾ and a test search was performed (Figure 2).

| Search | Strategy | Records |
|--------|--|---------|
| #1 | EMBASE = 'professional quality of life' AND (helpers OR fireman OR firefighter OR paramedics OR 'rescue workers' OR 'rescue personnel' OR 'emergency medical technicians' OR emt OR 'military emergency'); | 16 |
| #2 | SCOPUS = TITLE-ABS-KEY ("professional quality of life" AND (firefighters OR rescue)) | 19 |
| #3 | PUBMED = "professional quality of life"[All Fields] AND (("Firefighters"[MeSH Terms] AND ("firefighter s"[All Fields] OR "Firefighters"[MeSH Terms] OR "Firefighters"[All Fields] OR "firefighter"[All Fields] OR "firefighting"[All Fields]) AND ("Firefighters"[MeSH Terms] OR "Firefighters"[All Fields] OR ("fire"[All Fields] AND "rescue"[All Fields] AND "personnel"[All Fields])) OR "fire and rescue personnel"[All Fields]) AND ("Firefighters"[MeSH Terms] OR "Firefighters"[All Fields] OR ("fire"[All Fields] AND "fighters"[All Fields]) OR "fire fighters"[All Fields]) AND ("Firefighters"[MeSH Terms] OR "Firefighters"[All Fields] OR ("fire"[All Fields] AND "fighter"[All Fields]) OR "fire fighter"[All Fields])) OR ("rescuer"[All Fields] OR "rescuer s"[All Fields] OR "rescuers"[All Fields] OR "first responder"[All Fields])) | 517 |
| #4 | SCIENCE DIRECT TI= ("professional quality of life" OR "professional quality of life scale" AND (firemen OR firefighters OR rescue OR emt OR paramedics OR "military emergency")) | 21 |
| #5 | APA (PSYCINFO) APA = ("professional quality of life" OR "professional quality of life scale" AND (firemen OR firefighters OR rescue OR emt OR paramedics OR "military emergency")) | 680 |
| #6 | GOOGLE SCHOLAR ("qualidade de vida profissional" OR "professional quality of life") AND (bombeiros OR firemen OR firefighters OR rescue OR EMT OR paramedics OR paramedicos OR "military emergency") | 3080 |
| #7 | CINAHL: ((MH "Firefighters") OR TI (firefighters or fire fighters or fire service or firefighting) OR AB (firefighters or fire fighters or fire service or firefighting) OR ((MH "Rescue Work") OR (MH "Ice Rescue") OR (MH "Water Rescue")) OR TI (rescuer or paramedic or "first responder") OR AB (rescuer or paramedic or "first responder")) AND (TI "Professional quality of life" OR AB "Professional quality of life") | 3 |
| TOTAL | | 4336 |

Figure 2 – Search Strategy Test: Embase; Scopus; Pubmed; Science Direct; APA; Google Scholar; CINAHL. Manaus, AM, Brazil, 2023

Third stage

The third stage is based on the inclusion of articles cited in the references of the studies selected Initially and that are in accordance with inclusion criteria.

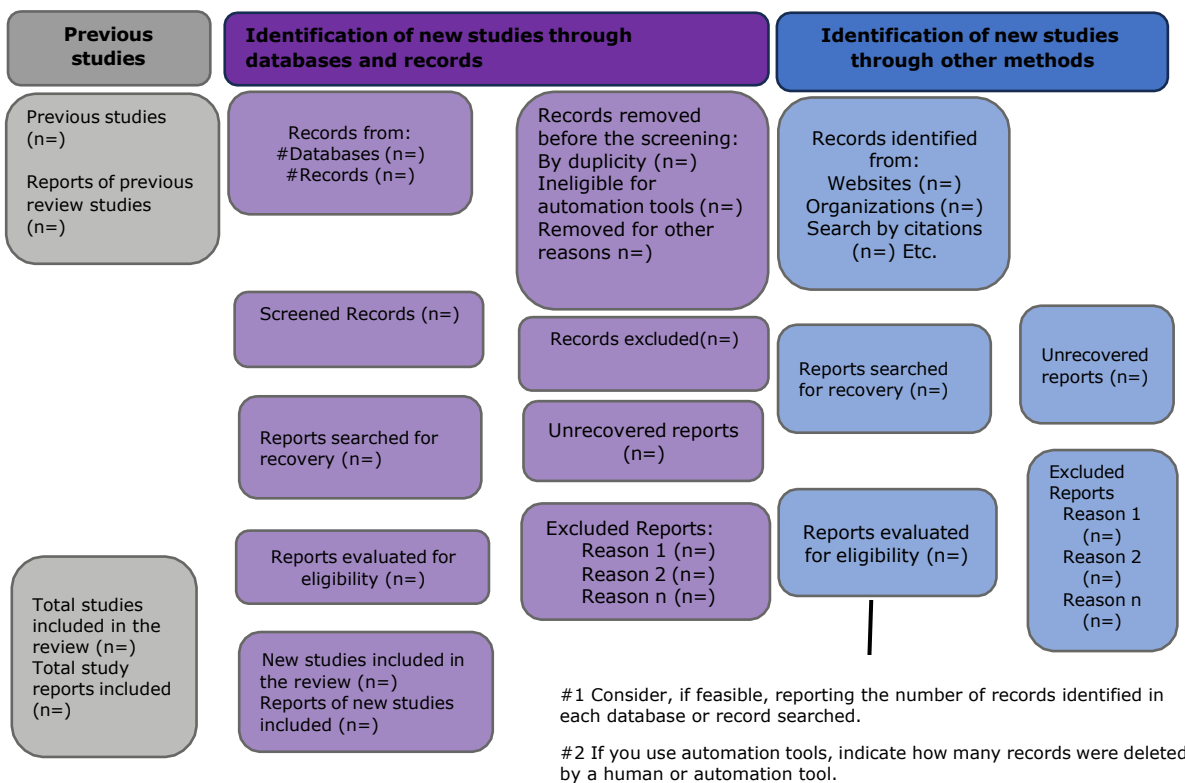
Types of fonts

The design and development for this scope review protocol was the Preferred Reporting Items for Systematic review and Meta-Analysis Protocols (PRISMA-P)⁽¹⁷⁻²⁰⁾. Articles extracted from the databases will be included: PUBMED, CINAHL, LILACS, SCOPUS, EMBASE, and Google Scholar, as well as, will *include sites* of saving and rescue organizations, fire fighters, and Library of Theses and Dissertations.

Opinion articles, papers published in scientific events proceedings, narrative, traditional reviews, publications of advertising websites on the subject will not be included, since they will not contribute to the objective of the research. The filters will be: Portuguese, Spanish and English languages, without delimitation of time.

Selection of studies

After the three search steps, the recovered studies will be grouped into a single database by means of the software "MENDELEY" and the results will be analyzed by the scoring diagram PRISMA-SCR⁽¹⁸⁻²⁰⁾ (Figure 3), and submitted for publication.



Source: Flowchart PRISMA Adapted by Page *et al.*, 2021 and Peters *et al.*, 2020.

Figure 3 – PRISMA 2020 flow diagram model for systematic reviews. Manaus, AM, Brazil, 2023

Data extraction

The analysis of the articles of the final sample will include specific details about the articles, such as title; formation of the main author; date of publication; country of research; design

of the research study; objective/proposal; participants/sample; instrument of data collection; summary/most relevant ideas; conclusions/analyzes/recommendations; reviewers' comments, organized in a spreadsheet created by the authors (Figure 4).

| Variable | Standard |
|------------------------------------|---|
| Title | Does the title apply to the inclusion criteria? |
| Graduation of the Principal Author | What is the graduation of the lead author? |
| Date of publication | When was the article published? |
| Methodology country | In which country is the survey carried out? |
| Research Study Project | Examples: Cross-sectional, longitudinal, mixed |
| Objective/proposal | What objectives have been proposed? |
| Participants/sample | Who are the participants? |
| Data collection instrument | What is the data collection instrument, which version is used? |
| Abstract/most relevant ideas | What are the most relevant ideas contained in the abstract? |
| Conclusions/analyzes | What were the main conclusions, and analyzes reported? |
| Additional aspects/recommendations | What additional aspects and recommendations have been identified? |

Figure 4 – Article variables and analysis patterns. Manaus, AM, Brazil, 2022

Data presentation

The data presentation will follow the recommendation of PRISMA-P⁽¹⁸⁻²⁰⁾ (Figure 5). All extracted data will be analyzed using descriptive

statistics and presented in the form of a narrative summary, diagrams, or tables, according to the objectives of this review.

| Item | Description |
|-------------------|--|
| Day of change | This should be the effective date of the change in the protocol |
| Section | Specify where the change would be found in the protocol |
| Original Protocol | Describe the original modified protocol item |
| Revised protocol | Describe the change in the protocol |
| Justification | Explain the reasons, what is expected and cares not to produce bias. |

Figure 5 – Records of changes in variable patters. Manaus, AM, Brazil, 2022

Ethics and dissemination

There was no need for approval in the ethics board. The results will be shared through open access publication in peer-reviewed journal.

CONFLICT OF INTERESTS

The authors have declared that there is no conflict of interests.

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|---|
| Project design: Almeida C da S |
| Data collection: Almeida C da S |
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| Writing and/or critical review of the intellectual content: Almeida C da S, Silva IR da, Calache ALSC |
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