Quality of Life of Sign Language Interpreters: A Systematic Review Protocol

Leandro Vieira Lisboa (leandrovieiralisboa@outlook.com)
Universidade Federal de Goiás

Sara Ribeiro Nunes
Universidade Federal de Goiás

Neuma Chaveiro
Universidade Federal de Goiás

Dolors Rodríguez-Martín
Universitat Autònoma de Barcelona: Universitat Autonoma de Barcelona

Protocol

Keywords: Quality of life, interpreter, sign language, systematic review

DOI: https://doi.org/10.21203/rs.3.rs-102461/v1

License: This work is licensed under a Creative Commons Attribution 4.0 International License.
Read Full License
Abstract

Background

The sign language interpreter is a professional who has the ability to be the communication link between users of two languages (oral and sign). Due to the physical and mental demand in the performance of this profession, health studies that includes sign language interpreters are necessary, such as health related Quality of Life (QoL).

Methods

The study will be conducted by two independent reviewers following the rules of the Preferred Reporting Items for Systematic Reviews and Meta-Analyzes (PRISMA), a search will be carried out in the main databases: LILACS; SciELO; ScienceDirect; Scopus Elsevier; PubMed; Web of Science for the selection of articles published until 2020. There will be no language or locale limitations. The assessment of methodological quality will be carried out using instruments from the Joanna Briggs Institute (JBI).

Discussion

This systematic review aims to analyze the QoL of sign language interpreters from a systematic review.

Systematic review registration

PROSPERO, CRD42020181573.

Background

The concept of health defined by the World Health Organization (WHO) concerns not only the absence of disease, but also physical, mental and social well-being, in perfect state of harmony. Because it presents a predictor of reliability to the self-assessment of health status, it can be indicated for the epidemiological survey, and thus to outline new approaches to worker health care [1, 2].

Occupational health in the field of public health is understood as a set of multidisciplinary practices with the common objective of promotion, prevention, recovery and rehabilitation. In this perspective, the area of knowledge that aims to understand the relationships between work and the health of the employer is the health of the worker. Monitoring the work environment and the worker is an important instrument for early detection of abnormal conditions in the work environment and thus to intervene specifically in the problem raised [3].

WHO has defined some factors that characterize quality of life (QoL) as being positive or negative. QoL can be defined as a particular perception, that each person has of themselves, in relation to their culture, standard of living, concerns, social position, values, objective and health condition that will determine whether the individual has a good perception or poor QoL [4].
One of the manifestations of a people's cultural identity is their mother tongue, as it allows the expression of subjectivity and becomes a cultural heritage for their successors. Sign language is considered the native language of the deaf, it is "alive" like any other language and for that reason it presents linguistic variations over the years. Sign language acquisition will occur through contact between the deaf and their peers in the deaf community [5].

The sign language interpreter is the professional who has the training to be the communication link between users of two languages, one auditory-oral and one visual-gestural, their function is to transmit the contextualized content, even when there are no direct referents, from a source language to a target language, that is, it works with two language pairs. This group of workers has a psychological overload due to the cognitive demand resulting from many hours a day dedicated to translation work, with little or no rest time, in addition to physical overload due to repetitive movements that can lead to musculoskeletal disorders [6, 7].

It is known that the worker who needs to use the upper limbs (UL) with repetitive movements, speed, vibration, with an uncomfortable position and who needs muscular strength in his performance has a high prevalence of musculoskeletal disorders, and when the dominant upper limb of the professional is affected, their perception of QoL decreases significantly [8].

**Objectives**

The objectives of this systematic review are:

1. Analyze the perception of QoL of a sign language interpreter;
2. Correlate the functionality of sign language interpreters and the perception of quality of life.

**Methods**

This is a systematic review of studies that analyze QoL in sign language interpreters. The review was registered in the International Prospective Register of Systematic Reviews (PROSPERO) database [9] with registration number CRD42020181573. This protocol was structured according to the guidelines of the Preferred Report Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P) [10] (see Additional file 1).

The guiding question of this study was: do sign language interpreters have an impact, positive or negative, on the perception of quality of life due to their professional performance?

**Eligibility criteria**

The studies will be selected according to the criteria described below:

**Participants**
Studies with people of both sexes, with or without pathologies.

**Study designs**

Only observational studies that used generic or specific QoL tools should be included. Qualitative studies will be excluded.

**Interventions or exposure**

Professionals who are sign language interpreters. Exclusion of other professionals.

**Comparators**

Not applicable.

**Outcomes**

**Primary outcome**

The main outcome to be considered are the QoL indicators described in the studies according to the domains of the psychometric instruments used for QoL analysis.

**Secondary outcomes**

Secondary outcomes will not be considered in this review.

**Search methods**

The terms that will be used in the search were consulted in the Health Sciences Descriptors (DeCS) [11] and Medical Subject Headings (MeSH) [12],

Searches will be conducted in the following databases: Latin American and Caribbean Health Sciences Literature (LILACS) [13], Scientific Electronic Library Online (SciELO) [14], ScienceDirect [15], Scopus Elsevier [16], United States National Library of Medicine (PubMED) [17], Web of Science [18]. The search for articles will take place in the year 2020 and no date and language filters will be used in the databases.

The reference lists of the included articles will be analyzed to ensure studies that have not been found by searching the databases. For database searches, the following keywords or search terms will be used: “quality of life” OR "hrqol" OR "health related quality of life" OR "health-related quality of life" OR "life quality" AND "sign language interpreter" OR "Interpreters" OR "Interpreter" OR "Sign Language Translator" OR "Translator". The data found in the search process will be organized in a Microsoft Excel spreadsheet.

**Selection of studies**

Two independent reviewers will conduct the search following three phases. After each phase, the authors will check the included and excluded studies and in case of disagreement the authors will analyze and
decide on the studies’ eligibility for review.

In phase 1, the title of the articles identified by the surveys will be selected according to the following criteria:

- Is the study with sign language interpreters? (Yes, it is not clear or not)
- Is it a quality of life study? (Yes, it is not clear or not)

In phase 2, the abstracts of the studies selected in phase 1 will be read and selected according to the following criteria:

- Is the study with sign language interpreters? (Yes, it is not clear or not)
- Is it a quality of life study? (Yes, it is not clear or not)
- Is it an observational study? (Yes, it is not clear or not)
- Does the study use any validated psychometric instrument for QoL analysis? (Yes, it is not clear or not)

In phase 3, the studies will be read in full and a table will be drawn up with the following information:

- Authors’ names
- Country of origin
- Study title
- Year of publication of the study
- Objective of the study
- Analysis tool
- Sample Number
- Main results
- Assessment of study risk bias

Immediately after filling in the information related to phase 3, the authors will present the reasons for exclusion from the studies and thus register in text for later consultation. None of the authors of this review will be blind to the titles of the journals or authors or institutions of study. A study flowchart will be made containing measures, such as identification, screening, eligibility and inclusion of items with quantities, and an explanation of the reason for exclusion.
Additional information from the authors of the included studies will be requested to resolve questions about study eligibility.

**Data extraction and management**

Using a detailed step-by-step, reviewers will be able to extract studies from the databases independently following the same “path” and organize them in Excel software spreadsheets. The summarized data will include the name of the authors of the studies, title of the journal, date of publication; country of origin of the studies; the assessment instruments of the participants’ QoL; socioeconomic profile of sign language interpreters; methodology; details of intervention and results. In case of possible differences found in the QoL tools, they will be analyzed by grouping the same or similar domains of the instruments. The reviewers will resolve any differences. In case of lack of information, the reviewers will contact the authors of the studies that were included in this review via email.

**Quality assessment**

The evaluation of the methodological quality of the articles will be carried out with instruments from the Joanna Briggs Institute (JBI) [19], according to the design of the selected study.

The classification of the studies will be identified as: “low risk of bias” when more than 80% of the established criteria are reached; “Medium risk of bias” when the criteria fulfilled are between 50% to 80% and “high risk of bias” when less than 50% of the criteria are reached according to the instrument used.

**Evidence synthesis**

A systematic narrative synthesis will be provided with information presented in the selected studies using tables to summarize and explain the characteristics and results of the included studies (authors; country; title; year of publication; objective; sample; instrument; result).

**Dissemination**

The results of this review will be submitted in a journal of the same theme, and from the peer review the results will be reported according to the items in the Preferred Reporting Items for Systematic Reviews and Meta-Analyzes (PRISMA) [20]. A flow chart will be used to show the selection of articles with the reasons for exclusion. The characteristics of the study and the results will be presented in summary tables. The current protocol follows the rules of PRISMA-P [10].

The results will also be disseminated to the research community and key stakeholders through presentations at relevant academic and non-academic meetings and through social media.

**Discussion**

This is the first systematic review of sign language interpreter QoL, as far as researched. We hope that this study will contribute to the discussion and creation of public policies as an insertion of protective
means in the work environments of these professionals so that the perception of QoL is positive. Discuss the importance of having a specific time for continuous interpretation and then a rest aiming at physical and mental recovery and a better quality in performing the work function.

The research will be part of a master's thesis, articles, posters and discussions that may instigate further research on this theme. This systematic review may have limitations, for example, the exclusion of works not published in scientific journals or presented at scientific events.

**Abbreviations**

DeCs: Descritores em Ciências da Saúde

IJB: Instituto Joanna Briggs

LILACS: Literatura Latino-Americana e do Caribe em Ciências da Saúde

MeSH: Medical Subject Headings

PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses

PRISMA-P: Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols

PubMEd: United States National Library of Medicine

QoL: Quality of Life

SciELO: Scientific Electronic Library Online

SCOPUS: Base de dados da ELSEVIER

SF-36: Medical Outcomes Study 36 - Item Short-Form Health Survey

UL: Upper limbs

WHOQOL-Bref: World Health Organization Quality of Life Scale Brief Version

WHO: World Organization of Health

**Declarations**

**Ethics approval and consent to participate**

Not applicable.

**Consent for publication**
Not applicable.

**Availability of data and materials**

Data sharing does not apply to this protocol, as no data sets were analyzed yet.

**Competing interests**

The authors declare that they have no conflicting interests.

**Funding**

This study will be financed by the authors themselves. Non-financial sources include the provision of library and database by Universidade Federal de Goiás in Goiânia, Goiás, Brazil.

**Authors' contributions**

LVL and SRN developed the protocol, the search strategy, the manuscript and the record of the systematic review. NC contributed to the design of the research and protocol questions, critically reviewed and provided comments on the manuscript drafts and agreed with the final version sent. DRM critically reviewed and provided comments on the draft manuscript and agreed with the final version submitted. All authors read, provided feedback and approved the final manuscript.

**Acknowledgements**

Not applicable

**References**

1. Segre M, Ferraz FC. O conceito de saúde. Rev. Saúde Pública. 1997; 31(5):538-542. doi: https://doi.org/10.1590/S0034-89101997000600016.

2. Petarli GB, Salaroli LB, Bissoli NS, Zandonade E. Autoavaliação do estado de saúde e fatores associados: um estudo em trabalhadores bancários. Cad. Saúde Pública. 2015; 31(4):787-799. doi: http://dx.doi.org/10.1590/0102-311X00083114.

3. JUNIOR JRV. Fisioterapia do Trabalho: Cuidando da Saúde Funcional do Trabalhador. São Paulo: Andreoli, 2014.

4. The WHOQOL Group. World Health Organization quality of life assessment (WHOQOL): position paper from World Health Organization. Soc Sci Med. 1995;41(10):1403-9.

5. WITCHS PH, LOPES MC. Deaf’s way of life and its cultural markers. Educ. rev. 2018; 34:e184713. doi: http://dx.doi.org/10.1590/0102-4698184713.

6. QUADROS RM. O tradutor e intérprete de língua brasileira de sinais e língua portuguesa. Brasília: MEC; SEESP, 2004.
7. WOODCOCK K, FISCHER S L. Occupational health and safety for sign language interpreters. Toronto: Ryerson University, 2008. http://www.avlic.ca/docs/OHSGuideforSLI.pdf. Accessed 10 June 2020.

8. Moretto AF, Chesani FH, Grillo LP. Musculoskeletal disorder and quality of life in seamstresses in the city of Indaial, Santa Catarina, Brazil. Fisioter. Pesqui. 2017; 24(2):163-168. doi:https://doi.org/10.1590/1809-2950/16833624022017.

9. PROSPERO—International prospective register of systematic reviews http://www.crd.york.ac.uk/PROSPERO/. Accessed 17 July 2020.

10. Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart LA. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. BMJ. 2014; 10.1136/bmj.g7647.

11. DeCS - Descritores em Ciências da Saúde http://decs.bvs.br/. Accessed 05 August 2020.

12. MeSH - Medical Subject Headings https://www.ncbi.nlm.nih.gov/mesh/. Accessed 05 August 2020.

13. Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS). https://lilacs.bvsalud.org. Accessed 30 August 2020.

14. Scientific Electronic Library Online (SCIELO). https://scielo.org/php/index.php. Accessed 30 August 2020.

15. ScienceDirect. https://www.sciencedirect.com. Accessed 30 August 2020.

16. Scopus Elsevier. https://www.elsevier.com. Accessed 30 August 2020.

17. United States National Library of Medicine (PubMED). https://pubmed.ncbi.nlm.nih.gov. Accessed 30 August 2020.

18. Web of Science. https://www.webofknowledge.com. Accessed 30 August 2020.

19. The Joanna Briggs Institute. The Joanna Briggs Institute Critical Appraisal tools, 2017 https://joannabriggs.org/critical-appraisal-tools. Accessed 30 August 2020.

20. Moher D, Liberati A, Tetzlaff J, Altman DG; PRISMA Group. Preferred reporting items for systematic reviews and meta-Analyses: the PRISMA Statement. PLoS Med. 2009; 6(7): e1000097.