

Qualidade de vida e distanciamento social: revisão sistemática da literatura

Quality of life and social distancing: systematic review of literature

Calidad de vida y distanciamiento social: revisión sistemática de la literatura

Recebido: 22/06/2020 | Revisado: 22/06/2020 | Aceito: 24/06/2020 | Publicado: 06/07/2020

Ana Karoline Brito de Oliveira

ORCID: <https://orcid.org/0000-0002-3610-7454>

Universidade do Estado do Pará, Brasil

E-mail: ana.koliveira@aluno.uepa.br

Matheus Sodré de Araújo

ORCID: <https://orcid.org/0000-0003-1947-361X>

Universidade do Estado do Pará, Brasil

E-mail: matheus.araujo@aluno.uepa.br

Samuel Filipe Lopes Alves

ORCID: <https://orcid.org/0000-003-1437-5674>

Universidade do Estado do Pará, Brasil

E-mail: samuel.alves@aluno.uepa.br

Letícia de Barros Rocha

ORCID: <https://orcid.org/0000-0001-5776-2581>

Universidade do Estado do Pará, Brasil

E-mail: debarrosrochaleticia@gmail.com

Marianne Lucena da Silva

ORCID: <https://orcid.org/0000-0002-7678-9007>

Universidade Federal de Goiás, Brasil

E-mail: mariannebsb@gmail.com

Rodrigo Santiago Barbosa Rocha

ORCID: <https://orcid.org/0000-0001-5964-946X>

Universidade do Estado do Pará, Brasil

E-mail: rodrigo.santiago.rocha@uepa.br

Katiane da Costa Cunha

ORCID: <https://orcid.org/0000-0001-5361-5090>

Universidade do Estado do Pará, Brasil

E-mail: Katiane.cunha@uepa.br

Resumo

A cidade de Wuhan, capital da província chinesa de Hubei, foi palco de um surto de um novo coronavírus chamado SARS-CoV-2 pela Organização Mundial da Saúde (OMS). Gradualmente, vários países desenvolveram estratégias para reduzir a contaminação da comunidade, incluindo isolamento social e bloqueio. O objetivo deste estudo é realizar uma revisão sistemática de estudos que avaliaram a qualidade de vida durante o distanciamento social nas pandemias. Uma pesquisa de alta sensibilidade foi realizada nas principais bases de dados científicas associadas à qualidade de vida (MEDLINE via PUBMED, Embase, Lilacs, Scielo, PsycInfo, Pepsic, Scopus e Cochrane Library). As versões de texto integral foram analisadas para qualidade metodológica por dois pesquisadores de forma independente e a discordância entre revisores foi resolvida por discussão ou arbitragem pelo outro pesquisador. Foram incluídos apenas estudos transversais que avaliaram a qualidade de vida relacionada à saúde durante os surtos de SARS-CoV, MERS-CoV e SARS-CoV-2. Foram excluídos editorial, carta ao editor, ponto de vista, apresentação de caso ou breve comunicação. Foram identificados 1072 estudos, dos quais 1067 foram excluídos seguindo o protocolo PRISMA, restando 5 artigos no final. Os pacientes afetados pelo SARS, MERS e COVID-19 apresentaram menor qualidade de vida e o distanciamento social piorou as coisas.

Palavras-chave: Infecções por coronavírus; Qualidade de vida; Pandemias; Isolamento social.

Abstract

The city of Wuhan, capital of China's Hubei province, was the scene of an outbreak of a new coronavirus called the SARS-CoV-2 by the World Health Organization (WHO). Gradually, several countries developed strategies to reduce community contamination, including social isolation and lockdown. The purpose of this study is carry out a systematic review of studies that assessed quality of life in social distance during pandemics. A high sensitivity search was carried out in the main scientific databases associated with quality of life (MEDLINE via PUBMED, Embase, Lilacs, Scielo, PsycInfo, Pepsic, Scopus e Cochrane Library). The full-text versions were analyzed for methodological quality by two researchers independently and disagreement between reviewers was resolved by discussion or arbitration by the other researcher. Only cross-sectional studies that assessed health-related quality of life during SARS-CoV, MERS-CoV and SARS-CoV-2 outbreaks were included. Editorial, letter to the editor, point of view, case presentation or brief communication were excluded. 1072 studies were identified, of which 1067 were excluded following the PRISMA protocol, with 5 articles

remaining at the end. Patients affected by SARS, MERS and COVID-19 had reduced quality of life and social distancing make it worse.

Key-words: Coronavirus infections; Quality of life; Pandemics; Social isolation.

Resumen

La ciudad de Wuhan, capital de la provincia china de Hubei, fue escenario de un brote de un nuevo coronavirus llamado SARS-CoV-2 por la Organización Mundial de la Salud (OMS). Gradualmente, varios países desarrollaron estrategias para reducir la contaminación de la comunidad, como el aislamiento social y el bloqueo. El objetivo de este estudio es realizar una revisión sistemática de estudios que evaluaron la calidad de vida en el período del distanciamiento social en pandemias. Se llevó a cabo una investigación de alta sensibilidad en las principales bases de datos científicas asociadas con la calidad de vida (MEDLINE a través de PUBMED, Embase, Lilacs, Scielo, PsycInfo, Pepsic, Scopus y Cochrane Library). Las versiones de texto completo fueron analizadas para la calidad metodológica por dos investigadores de forma independiente y el desacuerdo entre los revisores se resolvió mediante discusión o arbitraje del otro investigador. Sólo se incluyeron estudios transversales que evaluaron la calidad de vida relacionada con la salud durante los brotes de SARS-cov, MERS-CoV y SARS-CoV-2. Se excluyeron la editorial, la carta al editor, el punto de vista, la presentación del caso o la comunicación breve. Se identificaron un total de 1.072 estudios, de los cuales 1067 fueron excluidos siguiendo el protocolo PRISMA, quedando 5 artículos al final. Los pacientes afectados por SARS, MERS y COVID-19 tuvieron menor calidad de vida y el distanciamiento social empeoró las cosas.

Palabras clave: Infecciones por coronavirus; Calidad de vida; Pandemias; Aislamiento social.

1. Introduction

On December 31, 2019, the province of Hubei, China, reports a series of cases of pneumonia of unknown origin (The 2019-nCoV Outbreak Joint Field Epidemiology Investigation Team, 2020). Then, the unknown outbreak would be associated with coronavirus 2 of severe acute respiratory syndrome (SARS-CoV-2), the etiologic agent of COVID-19 disease (Zhu, et al., 2020). On March 11, 2020, the World Health Organization announced that COVID-19 should be characterized as a pandemic due to its high degree of contagion worldwide (WHO, 2020a).

Sequencing the SARS-CoV-2 viral genome reveals close relationships with SARS-CoV-1 (2003) and MERS-CoV (2012), responsible for other major outbreaks of severe acute respiratory syndrome (Zhu, et al., 2020). SARS-CoV-1 was the first virus of the genus betacoronavirus in which transmission from human to human was noted. Like other viruses of this genus, SARS-CoV-1 manifests itself clinically mainly through flu-like symptoms and breathing difficulties (Chan, et al., 2003). The MERS-CoV was identified primarily in Saudi Arabia and soon spread to the Middle East (Zaki, et al., 2012). Currently, the contamination of both is controlled and few cases are verified annually (WHO, 2020b).

Studies show that contamination by viruses of the genus betacoronavirus occurs mainly through unprotected and close contact with infected (To, et al., 2020; Poutanen, et al., 2004). In addition, places where health services are provided tend to be considered as sources of transmission.

In this context, unlike SARS (2003) and MERS (2012), COVID-19 has less pathogenicity and greater transmissibility, making the number of infected people potentially higher (da Costa, et al., 2020). Even with the lowest pathogenicity, 14% of those infected needed hospital support and 5% of beds in Intensive Care Units (WHO, 2020c) while both SARS (2003) and MERS (2012) had a higher mortality rate, 9.6% and 34.4%, respectively (da Costa, et al., 2020).

However, considering the dangerousness of these diseases, none of them have effective pharmacological treatments or vaccines for prevention, making it necessary to use public and non-pharmacological interventions such as social detachment and contact tracking in order to avoid contagion of large numbers of people and consequently the overload of health systems.

Among these measures in the community are from the increase in social distance to the complete deprivation of the movement of people through punitive measures, a deprivation known as Lockdown (Nussbaumer-Streit, et al., 2020; Phelan, Katz, Gostin, 2020).

Studies indicate that the adoption of social distance measures can have a negative psychological impact on the population (Zhang, et al., 2020; Brooks, et al., 2020). In this context, the quality of life of people in the midst of pandemics can be affected, both healthy individuals who need to remain in quarantine and social distance, as well as isolates infected by the virus, in addition to health professionals who experience the impact on health systems pandemics such as COVID-19.

In this context, the systematic review in question seeks to analyze scientific studies on the impact on quality of life in relation to the social distance necessary to contain infections by the SARS virus (2003), COVID-19 (2019-2020) and MERS (2012).

2. Methods

Search strategy

A systematic review and meta-analysis was performed with quantitative data from articles collected between 2005 and 2020, in compliance with the recommendations and criteria described in the preferred reporting items for systematic reviews and meta-analyses (PRISMA) (Galvão, et al., 2015) and Cochrane Handbook (Higgins, Green, 2011) (Pereira, et al., 2020).

Sources of data

Potential studies were identified via a comprehensive strategy. The systematic review was performed in the following databases: MEDLINE (Ovid) ; EMBASE; The Cochrane´; Pepsic; PsycInfo; Lilacs e Scielo. The search strategy involved the crosschecking of keywords selected based on the Medical Subjects Headings (Mesh) and Descritores em Ciências das Saúde (Decs) . There was no language restriction. The following keywords were used for (i) Population studied: ("coronavirus"[All Fields] OR "coronavirus"[All Fields] OR "coronavirus infections"[All Fields] OR "betacoronavirus"[All Fields] OR "betacoronavirus"[All Fields] OR "betacoronavirus"[All Fields] OR "betacoronavirus"[All Fields] OR "coronavirus"[All Fields] OR "coronavirus"[All Fields] OR "coronaviruses"[All Fields] OR "Coronavirus Infection"[All Fields] OR "COVID-19"[All Fields] OR "2019 Novel Coronavirus Infection"[All Fields] OR "2019-nCoV Infection"[All Fields] OR "2019 nCoV Infection"[All Fields] OR "2019-nCoV Infections"[All Fields] OR "Novel Coronavirus Pneumonia"[All Fields] OR "2019 novel coronavirus"[All Fields] OR nCoV[All Fields] OR covid[All Fields] OR "SARS-CoV-2"[All Fields] OR "SARS2"[All Fields] OR "Wuhan coronavirus"[All Fields]); (i i) outcomes:(("anxiety"[MeSH Terms] OR "anxiety"[All Fields] OR "anxiety"[MeSH Terms] OR "anxiety"[All Fields] OR "hypervigilance"[All Fields] OR "anxiety"[MeSH Terms] OR "anxiety"[All Fields] OR "nervousness"[All Fields] OR "anxiety"[MeSH Terms] OR "anxiety"[All Fields] OR "social"[All Fields] AND "anxiety"[All Fields]) OR "social anxiety"[All Fields] OR "anxiety"[MeSH Terms] OR "anxiety"[All Fields] OR "social"[All Fields] AND "anxieties"[All Fields] OR "social anxieties"[All Fields]) OR "panic"[MeSH Terms] OR "panic"[All Fields] OR "panic"[MeSH Terms] OR "panic"[All Fields] OR "panics"[All Fields] OR "Life Stress" [All Fields] OR "Psychologic Stress" [All Fields] OR "Psychological Stressor" OR "Psychological Stressors". After the selection of potentially

relevant studies, the full-text versions were analyzed for methodological quality by two researchers independently and disagreement between reviewers was resolved by discussion or arbitration by the other researcher.

Types of studies and participants

The following criteria were adopted for the selection of the studies: Cross-sectional studies and who assessed health-related quality of life during SARS-CoV, MERS-CoV and SARS-CoV-2 outbreaks. Editorial, letter to the editor, viewpoint, case presentation or brief communication were excluded. Studies that did not assess Health-related quality of life were also excluded.

Data extraction

Initially the studies were exported to a Mendeley® file and reported in the PRISMA diagram (Figure 1). The first two screenings (selection by title and abstract) were performed by two independent researchers (ML and RS), who selected potential articles to be included in the final compilation. In cases where there were disagreements, a fourth independent researcher (KCC) resolved the discrepancies. Regarding data extraction, the three independent researchers (AK, MA and SA) used a form which was intended to record: study data (authors, journal name, country and study scenario, year of publication), methodological information (objective of the study, design, size of the total sample, aspect or variable of quality of life, exercise practice and instruments used to evaluate them).

Quality Assessment

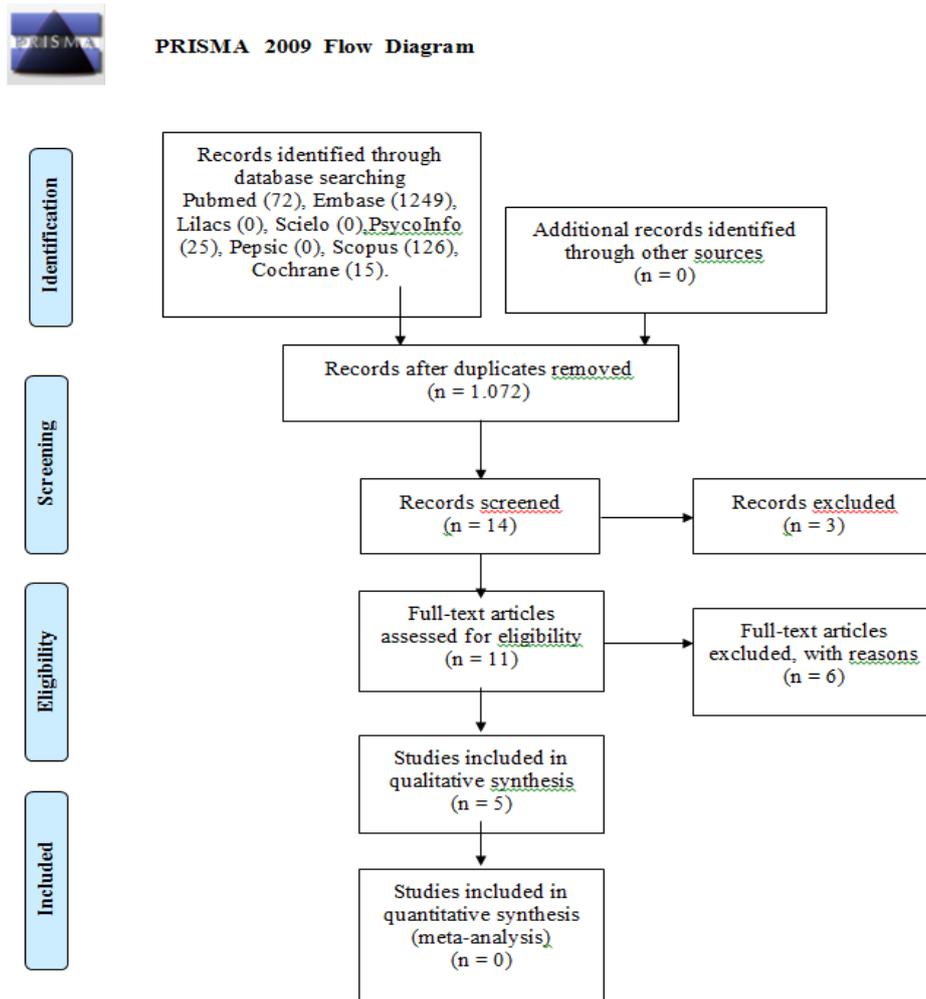
We used the Newcastle–Ottawa scale to assess the quality of the included studies. Relevant organizational websites including the Joanna Briggs Institute publishes a Reviewers' Manual, which is designed to support individuals who are undertaking systematic reviews following JBI methodologies and methods (Munn et al., 2015). This checklist contains 9 questions, which we divided into 3 domains: participants (questions 1, 2, 4, and 9), outcome measurement (6 and 7), and statistics (3, 5, and 8). A study was rated as having high quality when the methods were appropriate in all 3 domains. Quality assessment was also performed by 2 independent reviewers, and any uncertainties were resolved by consulting a third reviewer.

3. Results and Discussion

Selection and evaluation of studies

The bibliographic search identified 1487 studies through five searches selected from databases: 72 references from MEDLINE via PUBMED, 1249 from EMBASE, 25 from PsycInfo, 126 from Scopus, and 15 from Cochrane. The bibliographic databases of Lilacs, Scielo and Pepsic did not provide articles based on the present search strategy. Of the articles selected in the databases, 415 corresponded to duplicates and were removed. Then, a detailed analysis of 1072 titles and abstracts was carried out. Full-text articles were retrieved for the remaining 14 records, of which 8 were excluded for not directly assessing health-related quality of life. Finally, 5 studies were found eligible for inclusion in this review (Table 1). Figure 1 represents the PRISMA of the present review.

Figure 1 - PRISMA Flow Diagram of the records.



Source: The authors.

Included studies

This review contains only cross-sectional, non-randomized articles that together accounted for a sample size of 4,198 people, all over 18 years of age. The publication years ranged from 2005 to 2020 and all records were published in the English language.

Table 1 - Characterization of cross-sectional studies.

Author	Population	Instrument	Time of Application	Outbreak
Pulvirenti et al.	Patients with Primary Antibody Deficiencies (PADs)	CVID_QoL	Quarentine	SARS-CoV 2
Kwek et al.	SARS-CoV Patients	SF-36 ¹	During SARS-CoV outbreak	SARS-CoV
Hui et al.	SARS-CoV Patients	SF-36	After quarentine	SARS-CoV
Batawi et al.	SARS-CoV Patients	SF-36	After quarentine	MERS-CoV
Nguyen et al.	General Population	SF-36	After quarentine	SARS-CoV 2

Source: The authors.

The geographical representation of the included records was: Asia (3), Europe (1), Middle East (1), no study in Africa, Oceania or America was included. Additional information about the included studies is listed in Table 1.

Quality of life

Of the included studies, four analyzed quality of life using the “The 36-Item Short Form Health Survey (SF-36)” (Hui et al., 2005; Batawi et al., 2019; Kwek et al., 2006; Nguyen et al., 2020), an internationally validated instrument that seeks to detect clinical differences in the health status of the general population and people affected by some major illness (Ware, Sherbourne, 1992).

One study assessed quality of life using the "Related Quality of Life Questionnaire for Common Variable Immunodeficiency (CVID_QoL)", a specific instrument to assess the quality of life of people with immunodeficiencies (Andersen, Midttun, Feragen, 2019).

Both instruments assess quality of life through the concept of Health-related quality of life (HRQoL) which integrates physical, emotional, mental and social functioning, with life satisfaction, considering not only life expectancy, but the impact of health on life satisfaction.

Methodological quality of the selected studies

The quality of the studies was analyzed by the Newcastle-Ottawa Scale (NOS) (Table 2). The Newcastle-Ottawa Scale is graduated by a system with stars graduation that goes from 0 to 9 delimited in three domains: selection, comparability and outcome. Higher grades represent better quality.

Table 2 - Methodological quality of the studies by Newcastle-Ottawa Scale.

Author	Year	<u>Representativeness of the sample</u>			Ascertainment of exposure (risk factor)	Comparability The subjects in different outcome groups are comparable, based on the study design or analysis. <u>Confounding factors are controlled.</u>	<u>Outcome</u>		TOTAL SCORE (OUT OF 10*)
		<u>Representativeness of the sample</u>	<u>Sample size</u>	<u>Non-respondents</u>			<u>Assessment of the outcome</u>	<u>Statistical test</u>	
<u>Pulvirenti et al.</u>	2020	*	*		**	*	*	*	7
<u>Kwek et al.</u>	2006	*	*	*	**	*	*	*	8
<u>Hui et al.</u>	2005	*			**	*	**	*	7
<u>Batawi et al.</u>	2019	*	*		**	*	**		7
<u>Nguyen et al.</u>	2020	*	*		**	*	*	*	7

Only one study received a score of eight points in NOS (18), the other four received a score of 7 points (15–17,21). Source: The authors.

The four studies used for this systematic review had a high score, demonstrating good methodological quality employed by the authors, being on a scale that goes up to 10, all presented evaluations between 7 and 8, when submitted to evaluation by the Newcastle-Ottawa Scale.

The risk assessment of bias through “The Joanna Briggs Institute Critical Appraisal Checklist for Analytical Cross Sectional Studies”. The results were described in Table 3.

Table 3 - Study bias risk included according to JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies.

Author	Were the criteria for inclusion in the sample clearly defined?	Were the study subjects and the setting described in detail?	Was the exposure measured in a valid and reliable way?	Were objective, standard criteria used for measurement of the condition?	Were confounding factors identified?	Were strategies to deal with confounding factors stated?	Were the outcomes measured in a valid and reliable way?	Was appropriate statistical analysis used?
Pulvirenti et al.	yes	yes	Unclear	No	No	No	yes	yes
Kwek et al.	yes	yes	yes	yes	Unclear	Unclear	yes	yes
Hui et al.	Unclear	yes	yes	yes	No	No	yes	yes
Batawi et al.	yes	yes	yes	yes	yes	yes	Unclear	yes
Nguyen et al.	yes	yes	yes	No	No	No	yes	yes

Source: The authors.

Among the 5 studies analyzed, Kwek et al (2006), Hui et al (2005), Nguyen et al (2020) and Batawi et al (2019) used the SF- 36 to assess HRQoL and Pulvirenti et al (2020) used CVID_QoL.

The domains of quality of life of patients 3 months after recovery from the acute phase of SARS are affected when national standards are compared. Improvements were presented over time through all parameters in the participants who answered the questionnaire six and twelve weeks after recovery from the acute phase of SARS. In relation to ICU patients with SARS, a worse index of vitality and greater suffering is perceived in relation to the restriction of roles due to physical problems in patients after 3 months of recovery from the acute phase of the disease. Although the number of patients in the ICU was small to be conclusive, admission to the ICU had an impact on the physical domain of the instruments, being a more appropriate severity index for a febrile episode of SARS and those with greater pulmonary involvement had a worse restriction of the physical role and lower vitality scores (Kwek et al., 2006). A number of factors can contribute to the worsening of the quality of life in these patients who are admitted to intensive care units, ranging from components related to the disease to the isolation of relatives and friends.

Survivors of SARS who went and did not go to the ICU, after 6 months of onset of the disease, had an impairment of HRQoL when compared to normative data. In addition, when comparing patients who required ICU admission to patients treated in medical wards, it is evident that 3 months after the beginning of SARS there is a significantly lower score in role limitation due to physical problems and social functioning for the age range of 18 and 40 years

(n = 19) and there is no significant difference for the age range of 41 to 64 years (n = 12), whereas after 6 months of disease onset, there is no significant difference in the questionnaire domains, except for the low score in BP for the age range of 41 and 64 years (n = 12). It is noteworthy that there are no significant differences in domain scores after six months of disease onset when comparing patients who did not require intubation in the ICU (n = 25) with those who required intubation (n = 6) (Hui et al., 2005). Older patients seem to have a worse quality of life when compared to younger people affected by SARS, this can occur due to the worsening of associated comorbidities and also trigger other diseases in elderly patients.

In a multivariate analysis, the HRQoL score was lower in people with COVID-19, 60 years of age or older, already married or with comorbidity while the HRQoL was higher in men, people with higher education, people with their own business, people with greater capacity to pay for medicines, people with medium or high social status, people who do not drink and people who practiced physical activity (Nguyen et al., 2020).

When comparing survivors of MERS and patients with Severe Acute Respiratory Infection (SARS) non-MERS, the domains physical functioning, physical role, general health, vitality and summary of the physical component showed significantly high scores, with no significant difference after adjustment for possible factors of confusion. Regarding the comparison of MERS patients admitted to the ICU and MERS survivors treated in medical wards, the scores were significantly lower in the domains of physical functioning, general health, vitality, emotional function and summary of the physical component, with a summary score of the lower mental component for the patients. survivors of the MERS ICU and no significant difference for the physical component after adjusting for confounding factors (Batawi et al., 2019). The worsening of quality of life is common in patients with respiratory distress syndrome who are admitted to the intensive care unit, regardless of the cause, there is a worsening of most scores related to quality of life.

Finally, in Italian patients affected by PAD, women scored low on the Global CVID_QoL. Patients who were forced to switch to home subcutaneous treatment and those who continued their usual subcutaneous treatment at home had similar global scores (PULVIRENTI et al). Overall, patients who were not at risk for anxiety or depression had low HRQoL scores and 58% of patients with PAD were not at risk for anxiety or depression. Furthermore, when comparing two areas with a different prevalence of COVID-19, there was no record of difference in the scores of the CVID-QoL questionnaire and in the risk of anxiety or depression (Pulvirenti et al., 2020). Apparently, the treatment performed at home also results in a reduction in the quality of life given the social distance and the conditions related to the

disease. This study has limitations since the articles collected are mostly in Asia, Europe, Africa and the Middle East, and studies involving data in the Americas, mainly in South America and Brazil, were not found during the bibliographic survey; care must be taken when transposing the results obtained in this review to the Brazilian reality given the conditioning factors related to quality of life and social distance during the pandemic period.

4. Final Considerations

The studies concluded that those affected by SARS, MERS and COVID-19 in general had reduced quality of life. Those infected who needed to undergo treatment in Intensive Care Units had significantly more affected physical functioning and vitality than those who had treatment in wards. As for COVID-19, the groups of elderly people with comorbidity and women were those who obtained the lowest quality of life.

Regarding research limitations, the studies analyzed are effective, but these are still few. There is still little evidence on how the quality of life is affected by COVID-19 in the longer term. In addition, the studies analyzed are limited to a few countries. It is still necessary to carry out more research on quality of life in this pandemic period in more regions that are undergoing several different forms of collective confrontation and research with greater monitoring of the participants. Finally, most studies are about people who have been infected, so there is a need for research on the groups that are being impacted more indirectly.

References

Andersen, J. B., Midttun, K., Feragen, K. J. B. Measuring quality of life of primary antibody deficiency patients using a disease-specific health-related quality of life questionnaire for common variable immunodeficiency (CVID_QoL). *J Patient-Reported Outcomes*. 2019 Dec 1;3(1).

Batawi, S., Tarazan, N., Al-Raddadi, R., Al Qasim, E., Sindi, A., Al Johni, S., et al. Quality of life reported by survivors after hospitalization for Middle East respiratory syndrome (MERS). *Health Qual Life Outcomes* [Internet]. 2019 Jun 11 [cited 2020 Jun 16];17(1):101. Available from: <https://hqlo.biomedcentral.com/articles/10.1186/s12955-019-1165-2>

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., et al.

The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 2020;395(10227):912–20.

Chan, J. W. M., Ng, C. K., Chan, Y. H., Mok, T. Y. W., Lee, S., Chu, S. Y. Y., et al. Short term outcome and risk factors for adverse clinical outcomes in adults with severe acute respiratory syndrome (SARS). *Thorax*. 2003;58(8):686–9.

Costa, V. G., Moreli, M. L., Saivish, M. V. The emergence of SARS, MERS and novel SARS-2 coronaviruses in the 21st century. *Arch Virol*. 2020;(0123456789).

Galvão, T. F., Pansani, T. S. A., & Harrad, D. (2015). Principais itens para relatar Revisões sistemáticas e Meta-análises: A recomendação PRISMA. *Epidemiologia e Serviços de Saúde*, 24(2), 335-342.

Higgins, J. P. T., Green, S. (editors). *Cochrane Handbook for Systematic Reviews of Interventions* Version 5.1.0 [updated March 2011]. The Cochrane Collaboration, 2011.

Hui, D. S., Joynt, G. M., Wong, K. T., Gomersall, C. D., Li, T. S., Antonio, G., et al. Impact of severe acute respiratory syndrome (SARS) on pulmonary function, functional capacity and quality of life in a cohort of survivors. *Thorax*. 2005 May 1;60(5):401–9.

Kwek, S. K., Chew, W. M., Ong, K. C., Ng, A. W. K., Lee, L. S. U., Kaw, G., et al. Quality of life and psychological status in survivors of severe acute respiratory syndrome at 3 months postdischarge. *J Psychosom Res*. 2006 May 1;60(5):513–9.

Nguyen, H. C., Nguyen, M. H., Do, B. N., Tran, C. Q., Nguyen, T. T. P., Pham, K. M., et al. People with Suspected COVID-19 Symptoms Were More Likely Depressed and Had Lower Health-Related Quality of Life: The Potential Benefit of Health Literacy. *J Clin Med* [Internet]. 2020 Mar 31 [cited 2020 Jun 16];9(4):965. Available from: <https://www.mdpi.com/2077-0383/9/4/965>

Nussbaumer-Streit, B., Mayr, V., Dobrescu, A. I., Chapman, A., Persad, E., Klerings, I., et al. Quarantine alone or in combination with other public health measures to control COVID-19: a rapid review. *Cochrane database Syst Rev*. 2020 Apr;4:CD013574.

Pereira, A. S., et al (2018). *Methodology of scientific research*. [e-Book]. Santa Maria City. UAB / NTE / UFSM Editors. Accessed on: July, 22th, 2020. Available at: https://repositorio.ufsm.br/bitstream/handle/1/15824/Lic_Computacao_Metodologia-Pesquisa-Cientifica.pdf?sequence=1.

Phelan, A. L., Katz, R., Gostin, L. O. The Novel Coronavirus Originating in Wuhan, China: Challenges for Global Health Governance. Vol. 323, JAMA - Journal of the American Medical Association. American Medical Association; 2020. p. 709–10.

Poutanen, S. M., McGeer, A. J. Transmission and control of SARS. Vol. 6, Current Infectious Disease Reports. 2004. p. 220–7.

Pulvirenti, F., Cinetto, F., Milito, C., Bonanni, L., Pesce, A. M., Leodori, G., et al. Health-Related Quality of Life in Common Variable Immunodeficiency Italian Patients Switched to Remote Assistance During the COVID-19 Pandemic. J Allergy Clin Immunol Pract. 2020 Jun 1;8(6):1894-1899.e2.

The 2019-nCoV Outbreak Joint Field Epidemiology Investigation Team, Li Q. Notes from the Field An Outbreak of NCIP (2019-nCoV) Infection in China — Wuhan , Hubei Province , 2019 – 2020. China CDC Wkly. 2020;110(5):79–80.

To, K. K. W., Tsang, O. T. Y., Leung, W. S., Tam, A. R., Wu, T. C., Lung, D. C., et al. Temporal profiles of viral load in posterior oropharyngeal saliva samples and serum antibody responses during infection by SARS-CoV-2: an observational cohort study. Lancet Infect Dis. 2020;20(5):565–74.

Ware, J. E., Sherbourne, C. D.. The MOS 36-item short-form health survey (Sf-36): I. conceptual framework and item selection. Med Care. 1992;

World Health Organization a. WHO Director-General’s opening remarks at the media briefing on COVID-19 - 11 March 2020. WHO Director General’s speeches. 2020. p.

World Health Organization b. WHO EMRO: MERS situation update, January 2020, MERS-

CoV, Epidemic and pandemic diseases. World Health Organization. 2020.

World Health Organization c. Clinical Management of COVID-19. World Health Organization. 2020;№3:c.30.

Zaki, A. M., Van Boheemen, S., Bestebroer, T. M., Osterhaus, A. D. M. E., Fouchier, R. A. M. Isolation of a novel coronavirus from a man with pneumonia in Saudi Arabia. N Engl J Med. 2012;367(19):1814–20.

Zhang, Y., Ma, Z. F.. Impact of the COVID-19 pandemic on mental health and quality of life among local residents in Liaoning Province, China: A cross-sectional study. Int J Environ Res Public Health. 2020 Mar;17(7):2381.

Zhu, N., Zhang, D., Wang, W., Li, X., Yang, B., Song, J., et al. A novel coronavirus from patients with pneumonia in China, 2019. N Engl J Med. 2020;382(8):727–33.

Percentage of contribution of each author in the manuscript

Ana Karoline Brito de Oliveira - 14,28%

Matheus Sodr  de Ara jo - 14,28%

Samuel Filipe Lopes Alves - 14,28%

Let cia de Barros Rocha - 14,28%

Marianne Lucena da Silva - 14,28%

Rodrigo Santiago Barbosa Rocha - 14,28%

Katiane da Costa Cunha - 14,28%