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REVIEW PROTOCOL

Opportunities and barriers to interprofessional communication in the Covid-19 context: scoping review protocol*

Oportunidades e barreiras à comunicação interprofissional no contexto da Covid-19: protocolo de revisão de escopo

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ABSTRACT

Objective: To map, in the literature, evidence of opportunities and barriers that influence interprofessional communication in the daily lives of Primary Health Care teams and interfere in the production of patient care in the face of the Covid-19 pandemic. **Method**: Scoping review, conducted under the recommendations from the Joanna Briggs Institute and the PRISMA-ScR extension, whose search strategy will take place from the definition of the controlled and corresponding vocabularies in combinations with Boolean operators. **Results**: Data on the bibliographic characteristics and methodological aspects of the studies will be extracted, in addition to elements, activities, or resources used that provide or restrain interprofessional communication. The mapped evidence will be presented in the form of diagrams, graphs, and narrative synthesis. **Conclusion**: It is assumed that professionals from different knowledge centers assume the commitment to a lesser or greater degree within the services. Furthermore, interprofessional communication becomes essential for improving care, especially when dealing with pandemic situations.
Descriptors: Health Personnel; Interprofessional Relations; Communication; Coronavirus Infections.

RESUMO

Objetivo: Mapear, na literatura, evidências de oportunidades e barreiras que influenciam a comunicação interprofissional no cotidiano das equipes da Atenção Primária à Saúde e interferem na produção do cuidado do paciente ante a pandemia da Covid-19. **Método**: Revisão de escopo, conduzida em conformidade com as recomendações do Joanna Briggs Institute e a extensão PRISMA-ScR, cujo procedimento da estratégia de busca acontecerá a partir da definição dos vocabulários controlados e correspondentes, em combinações com operadores booleanos. **Resultados**: Serão extraídos dados que constituem características bibliográficas e aspectos metodológicos dos estudos, além de elementos, atividades ou recursos empregados que oportunizam ou bloqueiam a comunicação interprofissional. As evidências mapeadas serão apresentadas em formato de diagramas, gráficos e síntese narrativa. **Conclusão:** Pressupõe-se que profissionais de diferentes núcleos de conhecimento assumam compromisso em menor ou maior grau dentro dos serviços. Outrossim, comunicação interprofissional torna-se ferramenta essencial à melhoria do cuidado, especialmente ao enfrentamento de situações pandêmicas.
Descritores: Pessoal de Saúde; Relações Interprofissionais; Comunicação; Infecções por Coronavírus.

INTRODUCTION

The implementation of the Unified Health System (SUS in Portuguese) proposed the adoption of differentiated work practices and processes, whose attention should be user-centered[1].

A big challenge that professionals face in the daily routine of services is the adoption of interprofessional and collaborative communication, essential for teamwork that provides comprehensive care to the user. One of the obstacles to efficient care is directly related to the weaknesses of communication flows. Communication between team professionals is one of the interprofessional competencies, which presupposes a relationship of interdependence betwe-

en professionals from different areas who work collaboratively to elucidate problems and collectively build paths to achieve common goals through exchanging knowledge[2]. In order that there to be no fragmentation of care, professionals must have common goals, articulate knowledge in an integrated way, and work on behalf of the population through communication[3]. Thus, the adoption of interprofessionality in daily work is fundamental for care practices since it involves the production of knowledge, communication, and collaboration processes, configuring itself as a way for transforming practices in the Unified Health System.

Communication is essential to healthcare and is influenced by each individual's subjectivity[4]. Effective communication helps in the dynamics of work processes[4].

Understanding communication processes, barriers, and opportunities will help overcome communication challenges encountered in the health sector. How communication occurs in the team directly affects the resoluteness of care.

The health teams were challenged to adopt strategies that facilitate the agility and breadth of information adequately and easily for professionals and patients to understand[6,7].

One of the difficulties in communication stems from the employment of social isolation, which makes face-to-face meetings difficult, impairing case discussions and work processes[8].

Given the relevance of the topic, and the possibility of filling knowledge gaps and inform the scientific community, decision-makers, policy makers, and users of health services, this scoping review protocol aims to map, in the literature, evidence of opportunities and barriers that influence interprofessional communication in the daily lives of Primary Health Care (PHC) teams and interfere in the production of patient care in the face of the Covid-19 pandemic.

METHOD

This protocol aims to generate a study with a scoping review approach that will be conducted according to the recommendations of the Joanna Briggs Institute (JBI), and with a framework based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR)[9].

One benefit of using the PRISMA statement is to guide research reporting so that it reflects the investigative actions carried out, without losing details, in addition to guaranteeing methodological rigor[10]. Likewise, among the advantages of adopting the scoping review method, mention is made of the possibility of providing an overview of the scientific evidence about a given phenomenon in a structured, systematized, impartial, and transparent way.

Before the construction of this protocol, the authors carried out research in the Cochrane Library, JBI Evidence Synthesis, PROSPERO, and PubMed, using the terms of the protocol title to verify the existence of protocols or scoping reviews published with the same theme. The result of this search brought up interesting and relevant topics[11,12]. However, none are in the preprint or published stage. Predominantly, published studies emphasize skills and competencies required of health professionals for teamwork, focusing on interprofessional education[9]. For these reasons, the development of this review protocol finds justification in addition to potentially contributing to the improvement of interprofessional communication processes in PHC units, during the SARS-CoV-2 pandemic.

This protocol is registered in the Open Science Framework (OSF) (https://osf.io/), under the number 10.17605/OSF.IO/SW42T.

Research question

The research question will employ elements of the PCC mnemonic (Population, Concept, and Context)[13]. So, the research question will be presented as follows:

(P) Population – health professionals working in PHC, who described their practices, opportunities, and barriers that influence interprofessional communication in the daily work in health facilities, in the context of the Covid-19 pandemic;

(C) Concept – interprofessional relationships and communication, as an exploratory tool, producing activities and resources that promote reciprocal interaction between two or more professionals;

(C) Context – health care scenarios in PHC units, which, during the new coronavirus pandemic, revealed opportunities and barriers that influence interprofessional communication and imply effective responses to coping with Covid-19 in the daily work.

Therefore, this scoping review will focus on "Interprofessional communication in PHC during the Covid-19 pandemic". It will be guided by a central investigative question and satellite questions, in the sense that these naturally surround the object for this scope, aiming to signify concepts

of mutual interactions between peers in the health work.

In this way, we ask: How do PHC teams characterize interprofessional communication in the daily work in health units to face Covid-19? What components of interprofessional communication provide opportunities or restrain relationships between health professionals to promote collaborative practices in times of the Covid-19 pandemic? Are there activities named by interprofessional communication employed among health professionals in times of the Covid-19 pandemic, and, if so, which ones?

Eligibility criteria, sources of evidence, and search strategy

The following studies will be eligible: primary studies with a descriptive, exploratory, analytical design, case report, case series, experience reports in article format, and articles available in full. It is assumed that these designs, whose data were collected exclusively for the study and obtained directly from the participant, have the potential to reveal attributes for the formulation of new research questions. Studies published in English, Portuguese and Spanish will be included, as the topic and problem addressed in this scoping review reach the worldwide coverage. Also, studies produced from March 2020, when the Covid-19 pandemic was declared, until July 2021, the month of preparation of this protocol, will be considered.

The literature search will include the National Library of Medicine (Medline via PubMed), SCOPUS, Web of Science, and the Cumulative Index to Nursing and Allied Health Literature (CINAHL) databases. The choice for these sources of evidence is based on the notoriety and trust they inspire in the scientific community in the health area, as well as on the available access via the Higher Education Personnel Improvement (CAPES) Portal. The search path will be duly recorded including access dates, and, if necessary, contact with the authors of the retrieved articles will be made.

The search strategy will be divided into two stages: the selection of controlled vocabularies from the Health Sciences Descriptors (DeCS in Portuguese) and the Medical Subject Headings (MeSH). Several combinations will be tested between the controlled, alternative, and corresponding terms, using the Boolean operators "AND" and "OR". Figure 1 illustrates the mnemonic map of the constructed strategy.

The strategy will be adequate and defined by an empirical judgment of the number of articles retrieved, appreciation of titles that contain at least one of the mnemonic terms, filtering according to the inclusion criteria, and refining through discussion between the authors. Studies that arouse interest in reading will be valued. Two independent authors will review the search process; in case of divergence, a consensus will be reached. In the second stage, the search strategy is expected to occur in the reference lists of included studies. The intention will be to identify relevant studies that may have been missed in the first search.

For these two strategic search stages, it will be necessary to detail the calibration occurrences and the records retrieved in each database. Figure 2, created in the Word® program, presents a sample of the search carried out in the Medline and SCOPUS databases, prepared by one of the authors, and assisted by a librarian.

Subsequently, the retrieved articles will be submitted to the filters available in the databases (language, time frame, textual format, and availability in full-text form) and immediately imported into the EndNote software for bibliographic management and grouping of studies by subject. The pre-selection will start by reviewing the titles and abstracts resulting in the selection of articles to be read in full. In this pre-selection and selection procedure, the previously established exclusion criteria will be applied; that is, duplicate studies will be identified and removed as well as those that do not answer the central research question, studies not made available in full form even after contacting the authors, and those that do not meet the objective of this review.

Excluded articles and reasons will be listed so that they can be reported later. Figure 3 exemplifies the mapping that will locate the number of exclusions and clarify the reasons why the articles were excluded.

Data extraction and evidence selection

The data extraction stage from the included articles will require techniques and tools that guide the scope of the investigation. The instrument models in Figures 4 and 5 will allow visualizing the mapping of data including characteristics and methodological aspects, such as name of the main author, title, year of publication, country, language of origin, journal, author affiliation, objectives, study design, sample

P	**DeCS/Alternative Terms**
	"Pessoal de Saúde" OR "Pessoal da Saúde" OR "Prestadores de Cuidados de Saúde" OR "Profissionais da Saúde" OR "Profissionais de Saúde" OR "Profissional da Saúde" OR "Profissional de Saúde" OR "Trabalhador da Saúde" OR "Trabalhador de Saúde" OR "Trabalhadores da Saúde" OR "Trabalhadores de Saúde"
	MeSH/Entry Terms
	"Health Personnel" OR "Health Care Providers" OR "Health Care Provider" OR "Healthcare Providers" OR "Healthcare Provider" OR "Healthcare Workers" OR "Healthcare Worker" OR "Health Care Professionals" OR "Health Care Professional"
C	**DeCS/Alternative Terms**
	"Relações interprofissionais" OR "Comunicação" OR "Comunicação Interdisciplinar"
	MeSH/Entry Terms
	"Interprofessional Relations" OR "Communication" OR "Interdisciplinary Communication"
C	**DeCS/Alternative Terms**
	"COVID-19" OR "Doença pelo Novo Coronavírus (2019-nCoV)" OR "Doença por Coronavírus 2019" OR "Doença por Coronavírus-19"
	MeSH/Entry Terms
	"COVID-19" OR "COVID 19" OR "COVID-19 Virus Disease" OR "COVID 19 Virus Disease" OR "COVID-19 Virus Diseases" OR "COVID-19 Virus Infection" OR "COVID 19 Virus Infection" OR "COVID-19 Virus Infections" OR "2019-nCoV Infection" OR "2019 nCoV Infection" OR "2019-nCoV Infections" OR "Coronavirus Disease-19" OR "Coronavirus Disease 19"

Figure 1 - Mnemonic map for building search strategies. Niterói, RJ, Brazil, 2021
Source: Prepared by the authors, 2021.

number, sociodemographic profile, and results. The extraction technique requires sensitive and attentive reading to track details of activities and resources that address concepts attributed by health professionals in the daily interprofessional work, key outcomes, and implications related to opportunities and barriers that influence interprofessional communication in the face of the Covid-19 pandemic.

Analysis and presentation of results

The IRAMUTEQ free software will be used for the organization, editing, and qualitative data analysis using the technique of textual analysis, making it possible to identify occurrences between words, indicating connectedness and helping to identify the representation structure[14].

The results will be presented using a flowchart adapted from the PRISMA diagram, tables, graphs, and through narrative writing. The presented content will make it possible to discuss essential elements and components present in interprofessional communication, in the daily life of health teams in PHC, during the Covid-19 pandemic. The results can also be classified into conceptual categories, providing a grouping of these in the order in which they emerge from the analysis.

In the comments, one of the reviewers asked the following question: "What will be the focus of the article, considering the current and expected stability with vaccination?"

At the time of publication of this protocol, February 2022, the Brazil was again devastated by Covid-19. The number of daily deaths exceeded 1,000/day, matching this protocol's initial writing period. However, advances in population immunization, social distancing, maintenance of well-ventilated environments, and the use of high-protection masks, minimize the risk of spread and contribute to reducing the lethality.

*Paper extracted from the master thesis "Communication processes and their influence on interprofessional work in Family Health Strategy teams", presented to the Fluminense Federal University, Niterói, RJ, Brazil.

CONFLICT OF INTEREST

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

Database and access date	Search key	Combination of terms	No. of articles retrieved
MEDLINE, on 07/28/2021	*#1*	**Search:** ("Health Personnel"[Title/Abstract] OR "Health Care Providers"[Title/Abstract] OR "Health Care Provider"[Title/Abstract] OR "Healthcare Providers"[Title/Abstract] OR "Healthcare Provider"[Title/Abstract] OR "Healthcare Workers"[Title/Abstract] OR "Healthcare Worker"[Title/Abstract] OR "Health Care Professionals"[Title/Abstract] OR "Health Care Professional"[Title/Abstract]) OR ("Health Personnel"[MeSH Terms])	554,868
	#two	**Search:** ((Interprofessional Relations[Title/Abstract]) OR (interdisciplinary communication[Title/Abstract])) OR (communication[Title/Abstract])	262, 704
	#3	**Search:** (COVID-19[Title/Abstract] OR "COVID 19"[Title/Abstract] OR "COVID-19 Virus Disease"[Title/Abstract] OR "COVID-19 Virus Infection"[Title/Abstract] OR "COVID 19 Virus Infection"[Title/Abstract] OR "COVID-19 Virus Infections"[Title/Abstract] OR "2019-nCoV Infection"[Title/Abstract] OR "2019 nCoV Infection"[Title/Abstract] OR "2019-nCoV Infections"[Title/Abstract] OR "Coronavirus Disease-19"[Title/Abstract] OR "Coronavirus Disease 19"[Title/Abstract] OR "2019 Novel Coronavirus Disease"[Title/Abstract] OR "2019 Novel Coronavirus Infection"[Title/Abstract] OR "2019-nCoV Disease"[Title/Abstract] OR "2019 nCoV Disease"[Title/Abstract] OR "2019-nCoV Diseases"[Title/Abstract] OR COVID19[Title/Abstract] OR "Coronavirus Disease 2019"[Title/Abstract] OR "SARS Coronavirus 2 Infection"[Title/Abstract] OR "SARS-CoV-2 Infection"[Title/Abstract] OR "SARS CoV 2 Infection"[Title/Abstract] OR "SARS-CoV-2 Infections"[Title/Abstract] OR "COVID-19 Pandemic"[Title/Abstract] OR "COVID 19 Pandemic"[Title/Abstract] OR "COVID-19 Pandemics"[Title/Abstract]) OR (COVID-19[MeSH Terms])	97,317
	#4	**#1 AND #2 AND #3**	330
SCOPUS, on 07/29/2021	*S1*	**TITLE-ABS** ("Health Personnel" OR "Healthcare Providers" OR "Healthcare Provider" OR "Healthcare Workers" OR "Healthcare Worker" OR "Health Care Professionals")	84,450
	S2	**TITLE-ABS** ("Interprofessional Relations" OR "communication" OR "interdisciplinary communication") "Interprofessional Relations" OR "communication" OR "interdisciplinary communication")	1,423,553
	S3	**TITLE-ABS** ("COVID-19" OR "COVID 19" OR "COVID-19 Virus Disease" OR "COVID-19 Virus Disease" OR "COVID 19 Virus Infection" OR "COVID-19 Virus Infections" OR "2019-nCoV Infection" OR "2019 nCoV Infection" OR "2019-nCoV Infections" OR "Coronavirus Disease-19" OR "Coronavirus Disease 19" OR "2019 Novel Coronavirus Disease" OR "2019 Novel Coronavirus Infection" OR "2019 Novel Coronavirus Infection" OR "2019 nCoV Disease" OR "2019-nCoV Diseases" OR "COVID19" OR "Coronavirus Disease 2019" OR "Coronavirus Disease 2019" OR "SARS-CoV-2 Infection" OR "SARS CoV 2 Infection" OR "SARS CoV 2 Infection" OR "COVID-19 Pandemic" OR "COVID 19 Pandemic" OR "COVID 19 Pandemic")	166,271
		S1 AND S2 AND S3	256

Figure 2 – Search strategy map. Niterói, RJ, Brazil, 2021

Source: Prepared by the authors, 2021.

Database	Number of articles screened by title and abstract	No. of articles excluded	Reasons for exclusion	Total of pre-selected for full screening	No. of articles excluded after full-text screening	Reasons for exclusion	Total of articles included in the scope

Figure 3 – Locator map of excluded articles and reasons. Niterói, RJ, Brazil, 2021
Source: Prepared by the authors, 2021.

ID	Main author, title, and year of publication	Country and language	Journal	Main author affiliation	Objective	Design	Main results

Figure 4 – Mapping of characteristics and methodological aspects. Niterói, RJ, Brazil, 2021
Source: Prepared by the authors, 2021.

ID	Category of professionals involved in the study	Activities and resources that address the concept of communication, interprofessional relationships	Study scenario/ context	Opportunities for interprofessional communication	Barriers to interprofessional communication

Figure 5 – Mapping of information on aspects related to the mnemonic participants, concept, context, and to the research question. Niterói, RJ, Brazil, 2021
Source: Prepared by the authors, 2021.

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