

Accessibility to public health services by patients with Acute Coronary Syndrome: a scoping protocol

Acessibilidade aos serviços de saúde pública por pacientes com Síndrome Coronariana Aguda: protocolo de escopo

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ABSTRACT

Objective: to map the scientific literature regarding how access to healthcare by patients with acute coronary syndrome occurs. **Method:** a scoping review protocol was designed to answer the question: how the access to healthcare by patients with acute coronary syndrome occurs? The search will be conducted in the VHL, PubMed, CINAHL, EMBASE, and gray literature databases. Subsequently, titles and abstracts of selected articles will be inserted in a Microsoft Excel spreadsheet that will be read and analyzed by two independent reviewers, and duplicate studies will be removed. The next phase will cover the full screening of the articles previously selected to confirm the selection. The extracted data will be presented in a table, and the analysis will descriptively take place to present the results better and meet the objectives proposed by this research. This protocol was registered in the Open Science Framework (OFS): DOI:10.17605/OSF.IO/NS9QK.

Descriptors: Acute Coronary Syndrome; Mortality; Health Services Accessibility.

RESUMO

Objetivo: mapear, na literatura científica, como ocorre o acesso à assistência de saúde por pacientes com síndrome coronariana aguda. **Método:** protocolo de revisão de escopo com intuito de responder à pergunta: como é a acessibilidade aos cuidados de saúde dos pacientes com Síndrome Coronariana Aguda? As buscas serão efetuadas nas bases de dados BVS, PubMed, CINAHL, EMBASE e literatura cinzenta. Posteriormente, títulos e resumos dos artigos recrutados serão colocados em planilha do Microsoft Excel, os quais serão lidos e analisados por dois revisores independentes, e os estudos duplicados serão removidos. A fase seguinte abrangerá o processo de leitura na íntegra dos artigos previamente selecionados para confirmação da seleção. Os dados extraídos serão expostos em tabela e a análise ocorrerá de forma descritiva, no intuito de melhor apresentar os resultados e atender aos objetivos propostos pela presente pesquisa. Realizou-se o registro deste protocolo no *Open Science Framework* (OSF), o que foi publicado, conforme DOI: 10.17605/OSF.IO/NS9QK.

Descritores: Síndrome Coronariana Aguda; Mortalidade; Acesso aos Serviços de Saúde.

INTRODUCTION

According to the World Health Organization, cardiovascular diseases are the main cause of death in the world. In other words, people die more annually from this reason than from any other disease⁽¹⁾. In Brazil, the mark reaches more than 1,100 deaths daily, around 46 per hour. It was estimated that by the end of 2021, about 400,000 Brazilians would die from cardiovascular diseases, with many of these deaths being preventable or postponed through preventive care and appropriate therapeutic measures⁽²⁾.

Among cardiovascular diseases, Acute Coronary Syndrome (ACS) consists of a group of clinical signs and symptoms and laboratory findings that reveal ischemia of the heart muscle and can be classified as Unstable Angina (UA), Acute Myocardial Infarction (AMI) without ST-segment elevation and AMI with ST-segment elevation. ACS is a multifactorial chronic inflammatory disease that affects the intima of medium to large arteries, where lipid deposition

occurs, favoring the formation of a plaque from a proliferative process, which can cause blood flow obstruction or rupture of the vessel lumen⁽³⁻⁴⁾.

Chest pain is the main symptom of ACS, which can spread to the left and right arm or even to the mandibular region, in addition to manifestations such as sweating, nausea, abdominal pain, and changes in consciousness. Pathologies presenting chest pain as a symptom require immediate assistance for a confirmatory diagnosis or rule out an imminent risk of death⁽³⁾.

Given this scenario, the population's broad and agile access to centers with hemodynamics services is essential to improve care for ACS in the Unified Health System (SUS in Portuguese). Moreover, health care regulation systems play a fundamental role in timely ordering access to health interventions and services, especially for diagnostic and therapeutic procedures for patients at greater risk, need, or clinical indication from different health services.

Individuals presenting a clinical picture of ACS, with complementary tests suggestive of cardiac ischemia, need to have priority in the referral, compared with other clinical conditions. For these situations, a referral to emergency services is needed⁽⁵⁾.

However, there are barriers to accessing health services in different world contexts. Regarding the political-structural barrier, it is possible to perceive obstacles, such as the absence of health coverage, lack of programs that present social security and health insurance, and individuals without income to access private health services. Regarding organizational issues, the inefficiency of the referral mechanism is highlighted, as well as the obstacles to accessing public health services. An effective system of reference and counter-referral is considered key for integrating healthcare networks and implementing the principle of integrality⁽⁶⁾.

Certain challenges are linked to some characteristics of the services, such as opening hours, availability of medical and dental services, lack of information about the services provided, quality, and reception. In addition, other barriers to access include geographic, cultural, and ethnic barriers⁽⁷⁾.

Based on preliminary research, we identified a scarcity in the literature of primary studies on accessibility to health services by patients with Acute Coronary Syndrome. However, searches carried out in the JBI Evidence Synthesis, in the

Cochrane Database of Systematic Reviews, in the *Portal Periódicos Capes*, and in PROSPERO resulted in no current and ongoing scoping or systematic review on the topic.

In this context, the need to carry out this review emerged as we recognize the importance of understanding the barriers that influence access to diagnosis and treatment. Consequently, opportunities for improvement are identified that can strengthen the healthcare network in the care of users with ACS, in addition to the contribution of information capable of equipping health managers in decision-making in the formulation and implementation of new strategies in the SUS. The need to elaborate on this review protocol is justified as, despite being a current topic, gathering data regarding the accessibility to health services by patients with ACS is necessary.

Given the above, this study aimed to describe a scoping protocol designed to map the scientific literature regarding how patients with acute coronary syndrome access healthcare.

METHOD

This scoping review protocol will follow the methodology proposed by The Joanna Briggs Institute (JBI)⁽⁸⁾. The protocol was registered in the Open Science Framework (OSF) (osf.io/3cxzb) and published (DOI: [10.17605/OSF.IO/NS9QK](https://doi.org/10.17605/OSF.IO/NS9QK)).

Review question

The research question was formulated using the PCC⁽⁸⁾ framework, in which P stands for Population – patients with ACS; C for Concept – accessibility to health services; and C for Context – public health units. Thus, the following guiding question was formulated: What is the evidence in the literature about the accessibility of patients with acute coronary syndrome to care in the healthcare network?

Inclusion criteria

For this review, the period of publication between 2000-2021 was defined as an inclusion criterion. Initially, the time frame was established as ten years. However, the time frame was extended to 20 years due to the scarcity of studies meeting the research objective. Quantitative and qualitative research extracted from primary and secondary sources will be included in English, Portuguese, Spanish and French, available in full, and for free. Articles addressing children and adolescents and regulatory systems not in the health care sector will be excluded.

Participants

Participants in this review will be patients with Acute Coronary Syndrome. Studies carried out with adult patients with ACS will be considered for inclusion.

Concept

Studies covering accessibility to health services will be considered in this review. Studies that discuss regulatory systems, barriers, and access to facilities will be included.

Context

Studies with patients from public health units, including primary and hospital care.

Types of sources

This study will include primary and secondary sources through randomized and non-randomized trials, observational case-control studies, and cohort studies. Series and case reports will also be considered, as well as protocols and clinical practice guidelines, literature reviews, dissertations, and opinion articles. The following databases will be searched: Virtual Health Library (VHL), National Library of Medicine (PubMed), Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Elsevier Biomedical Database (EMBASE).

Search strategy

A three-stage search strategy will be carried out for this review. An initial search was performed in January 2021 in MEDLINE (PubMed) and CINAHL, in which titles and abstracts of the articles were read and analyzed to capture the index terms used to describe the article. The following descriptors were used: "Acute Coronary Syndrome", "Myocardial Reperfusion", "Cardiac Catheterization", "Public Health", "Mortality", and "Access to Health Care" in Portuguese, English, Spanish and French, combined with the use of the Boolean operators AND or OR. Figures 1 and 2 present the complete search strategies used in MEDLINE (PubMed) and CINAHL in the first search stage.

Subsequently, a complete secondary search will be carried out in all the databases selected for the study (second search stage), using the initial search's descriptors, keywords, specifications, and index terms retrieved through the initial search. In addition, a third gray literature search

will be performed to include additional studies that meet the inclusion criteria established in the scoping review (third step). This review will consider studies in any language developed in the last 20 years, referring to the Brazilian healthcare network.

Selection of evidence

Subsequently, the titles and abstracts of the articles recruited by the searches will be inserted into a Microsoft Excel spreadsheet. Duplicate studies will be removed. After that, two independent reviewers will read and analyze the articles to identify those eligible for the present study to select the best scientific evidence. The next phase will cover the full screening of the articles previously selected by two independent reviewers to confirm the selection. Any differences identified during the selection of studies will be resolved by discussions with two additional reviewers. The exclusion criteria for this review will be studies conducted with children and adolescents addressing emergency catheterization and non-health regulatory systems. Furthermore, the results of selected searches and productions will be displayed in a Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA)⁽⁸⁾ flow chart.

Data extraction

Data from the studies included in the scoping review will be extracted by two independent reviewers using a data extraction instrument developed by the respective reviewers (Figure 3). The data extraction and collection instrument will be used to analyze better the results and detail methods and main findings to achieve the review's objective. Discussions will be held in case of possible divergences and disagreements between the reviewers, or a third reviewer will be consulted for resolution.

Data analysis and presentation

The extracted data will be presented in tables, diagrams, or flowcharts to meet the study's objective. The data will inform about the identification of the article, the title, the authors/year of publication, the study design, the study location, in addition to the type of ACS, the category of health service, the form of accessibility, time of health care access, and possible barriers to health care access. Data analysis will descriptively take place to better present the results and meet the objectives proposed by this research.

Database	Search strategy	Retrieved articles
PUBMED	"Acute Coronary Syndrome"[MeSH Terms] OR "Acute Coronary Syndrome"[Title/Abstract] OR "Acute Coronary Syndromes"[Title/Abstract] OR "Myocardial Reperfusion"[MeSH Terms] OR "Myocardial Reperfusion"[Title/Abstract] OR "Coronary Reperfusion"[Title/Abstract] OR "Cardiac Catheterization"[MeSH Terms] OR "Cardiac Catheterization"[Title/Abstract] OR "Coronary Reperfusion"[Title/Abstract] OR "Cardiac Catheterizations"[Title/Abstract] OR "Heart Catheterization"[Title/Abstract] OR "Heart Catheterizations"[Title/Abstract] AND "Public Health"[MeSH Terms] OR "Public Health"[Title/Abstract] OR "Community Health"[Title/Abstract] AND Mortality[MeSH Terms] OR Mortalit*[Title/Abstract] OR "Case Fatality Rate"[Title/Abstract] OR "Case Fatality Rates"[Title/Abstract] OR "Death Rate"[Title/Abstract] OR "Death Rates"[Title/Abstract] OR "Mortality Rate"[Title/Abstract] OR "Mortality Rates"[Title/Abstract] AND "Health Services Accessibility"[MeSH Terms] OR "Health Services Accessibility"[Title/Abstract] OR "Access to Health Care"[Title/Abstract] OR "Access to Health Care"[Title/Abstract] OR "Accessibility of Health Services"[Title/Abstract] OR "Program Accessibility"[Title/Abstract] OR "Availability of Health Services"[Title/Abstract] OR "Health Services Geographic Accessibility"[Title/Abstract]	95

Figure 1 - Search strategy performed in PUBMED. Niterói, RJ, Brazil, 2021

Source: Prepared by the authors, 2021.

Database	Search strategy	Retrieved articles
CINAHL	("Acute Coronary Syndrome" OR "Acute Coronary Syndromes" OR "Myocardial Reperfusion" OR "Coronary Reperfusion" OR "Cardiac Catheterization" OR "Coronary Reperfusion" OR "Cardiac Catheterizations" OR "Heart Catheterization" OR "Heart Catheterizations") AND ("Public Health" OR "Community Health" AND Mortalit* OR "Case Fatality Rate" OR "Case Fatality Rates" OR "Death Rate" OR "Death Rates" OR "Mortality Rate" OR "Mortality Rates") AND ("Health Services Accessibility" OR "Access to Health Care" OR "Access to Health Care" OR "Accessibility of Health Services" OR "Program Accessibility" OR "Availability of Health Services" OR "Health Services Geographic Accessibility")	7

Figure 2 - Search strategy performed in CINAHL. Niterói, RJ, Brazil, 2021

Source: Prepared by the authors, 2021.

CONFLICT OF INTEREST

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

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Identification	Data
Title	
Author/Year	
Study location	
Journal	
Study design	
Type of ACS	
Type of health service	
Accessibility to health services	
Time of health care access	
Barriers to health care access	

Figure 3 - Data extraction and collection instrument. Niterói, RJ, Brazil, 2021

Source: Prepared by the authors, 2021.

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