



# Nurses' role in the prevention and emergencies of acute myocardial infarction associated with information technology

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### **ABSTRACT**

The prevalence of acute myocardial infarction (AMI) in Brazil is staggering, affecting between 300,000 to 400,000 individuals annually. Despite efforts by the Ministry of Health to combat this leading cause of mortality through programs like "The Acute Myocardial Infarction Care Line," the effectiveness of such initiatives remains in question. AMI poses a significant threat to both the Brazilian and global populace, often leading to fatal outcomes. While social media platforms, government websites, and digital channels have been utilized for health promotion and prevention strategies, their impact on reducing AMI incidence is uncertain. A comprehensive literature review, employing the Integrative Review method, was conducted to explore this issue. Notably, an analysis of the Ministry of Health's Instagram profile revealed a lack of direct posts addressing coronary syndromes or AMI prevention. Only peripheral topics like immunization and disease awareness campaigns were covered. To address this gap, a proposed reorganization of content distribution on government channels is recommended. Specifically, increasing the frequency of posts related to AMI, both directly and indirectly, is advised. These posts should focus on disease education, prevention measures, lifestyle modifications, and emergency responses. Furthermore, enhancements to the "Meu SUS Digital" platform are suggested to bolster information dissemination. Incorporating brief educational videos or pop-ups upon platform access can provide users with vital AMIrelated information, encouraging proactive health behaviors. Given the widespread use of "Meu SUS Digital," nurses are poised to play a crucial role in promoting its utilization among the populace. By advocating for the platform and emphasizing its benefits, nurses can facilitate greater engagement with preventive healthcare measures, ultimately contributing to the reduction of AMI incidence in Brazil.

**Keywords:** Acute myocardial infarction, Emergency, Nurse, Information technology, Prevention.

## **INTRODUCTION**

In Brazil, 300 thousand to 400 thousand people suffer acute myocardial infarction per year, being the main disease that affects the Brazilian and world population, and can progress to death (Ministry of Health, 2023). Acute myocardial infarction is a silent disease that can happen suddenly, or its evolution can gradually evolve from angina. When there is no time to act, acute myocardial infarction is considered fulminant (Varella, 2018). Between 5 and 7 cases of acute myocardial infarction, 1 will progress. Its incidence predominates in men, with onset of symptoms around the age of 45 (Freitas; Padilha, 2021).

In addition to the urgency and emergency services, the Ministry of Health has specific measures for the care of patients suffering from heart attacks, such as "The Acute Myocardial Infarction Care Line", a program that increases emergency actions and resources in the performance of the Mobile Emergency

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Care Service (Frasão, 2021). In addition, through social media, government websites, and digital channels, there are prevention and health promotion actions aimed at alleviating the problem of heart attacks, through lifestyle changes and early detection of diseases (Almeida; Stasiak, 2012).

The problem involved is that although there are specific services with an attempt to solve or alleviate the situation of acute myocardial infarction, such measures are not sufficiently effective, given that acute myocardial infarction continues to be the leading cause of death in Brazil, with a mortality rate of 183.3/100,000 (Camacho; et al, 2016).

Therefore, even if there are social media, government websites and digital channels of the Ministry of Health carrying out health promotion and prevention actions, the question remains. What is the relationship of social media, government websites, and digital channels to the promotion and effective prevention of acute myocardial infarction?

### MATERIALS AND METHODS

To carry out the present work, a literature review was adopted, elaborated by the Integrative Review method. Scientific articles found in the databases were used *Scientific Electronic Library Online* (*SciELO*), online journals and the Virtual Health Library (VHL).

# **RESULTS**

The proposal of the study in question was based on a survey of data from the instagram profile of the Ministry of Health during a period of one month. A total of 190 posts were made on a wide range of subjects, with an average of 6 posts per day.

The subjects covered in her posts were Immunization (14),
Works/Actions/Programs/Counterfakenews/Miscellaneous Announcements (61), Heritage (2), Leprosy (11), Women's Health (14), Didactic Material (1), Tropic Diseases (1), Dengue (20), Nursing Floor (1), Lgbtqiapn+ (2), Scientific Projects (6), Congresses (7), Measles (1), Milk Bank (1), Pertussis (1), Insects (3), Organ Donation (2), Cigarettes (1), Prejudice (2), HPV (2), ASD (1), Flu (1), HIV (3), Floods (1), Elderly (1), Indigenous Peoples (5), Covid-19 (8), Climate change (1), Food poisoning (2), Poliomyelitis (1), Mental health (2), Childhood (2), Mycoses (1), Infectious diseases (1), Self-care (1), Popular pharmacy (3), Eye health (1), Hemophilia (1), Summer diseases (1).

Some topics that were addressed more than others are reflected in some specific situations, such as Purple January and the leprosy campaign and the advent of summer, which can lead to dengue epidemics.

Throughout this survey, it is not possible to observe any posts made directly on the subject of coronary syndromes, acute myocardial infarction or the popularly called just infarction. In addition, only one post was made about smoking, no other indirect factors to acute myocardial infarction were



mentioned, nor alcoholism, stress, or poor eating and physical habits. Finally, promotional measures such as encouraging physical activity or adopting healthy habits were not addressed over the course of a month.

Thus, the purpose of the work in question is based on a reorganization in the use of government information channels with a focus on posts on the instagram page of the Ministry of Health and the use of "meu sus digital", considering that, in Brazil, 300 thousand to 400 thousand people suffer acute myocardial infarction per year, It is the main disease that affects the Brazilian and world population, and can progress to death (Ministry of Health, 2023).

It is necessary to reorganize the frequency of posts related to acute myocardial infarction directly and indirectly, as well as their content. This content should be based directly on the disease, prevention, encouragement to change physical and eating habits, encouragement to abandon indirect factors to acute myocardial infarction and what to do in emergency situations. Posts must be made every day addressing at least 1 of the topics mentioned, since the posting measure on the social network is 6 posts per day.

To complement the dissemination of information pertinent to the topic of acute myocardial infarction, the "meu sus digital" platform should undergo a small reformulation. When connecting to the platform, using the gov.com registration, a short video or pop-up must appear on the screen before having access to the platform's functionality, addressing at least one of these contents: directly about the disease, prevention, encouragement to change physical and eating habits, encouragement to abandon indirect factors to acute myocardial infarction and what to do in emergency situations.

The "Meu SUS Digital" platform is in wide demand by the population, since through it it is possible to have access to the national health card, vaccination certificates, as well as make appointments, check appointments and other data relevant to health. In order to increase the use of the platform and consequently succeed in the proposed measure to reduce the incidence of acute myocardial infarction in Brazil, it is up to nurses to disseminate the existence of this platform to the population and encourage its use in appropriate situations.

# FINAL CONSIDERATIONS

To deal with the problem of acute myocardial infarction, nurses are present both in primary care and in emergency services. It works with health promotion and also in more serious occurrences.

Through the information channels, nurses remain close to the population, disseminating data on the pathological process in question, as well as epidemiological data. In addition, it disseminates campaigns, does tracking, monitors and provides assistance in emergency situations.

It is suggested that the model of information dissemination through government information channels be reformulated. Through a reorganization in the dynamics of publications on the instagram page of the Ministry of Health and the inclusion of a functionality in the "meu sus digital" application, such



actions aim to prevent acute myocardial infarction. On instagram subjects about prevention, the disease, changing habits and what to do in emergency situations should be posted more frequently and in the application "meu sus digital" a short video or a "popup" with the same subject of instagram should be started at the time of the user's login to access the application.

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