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The coronavirus pandemic and impacts on health actions in the first half of 2020: integrative review

La pandemia del coronavirus e impactos en las acciones sanitarias en el primer semestre de 2020: revisión integrativa

A pandemia do coronavírus e os impactos nas ações de saúde no primeiro semestre de 2020: revisão integrativa

ABSTRACT

The objective of this work was to gather scientific evidence and verify manuals, guides, instructional protocols. Method: This is an integrative review with a selection of 11 articles available at PUBMED and in international journals published in January through April 2020. Results: It is possible to infer essential measures to minimize the impacts of the pandemic, when identifying a new coronavirus it generated challenges to contain the community transmission in the face of limited public health resources, to know the profile of the severity of the virus, to disinfect environments, to maintain an education and isolation of suspected cases. Conclusions: Based on the evidence obtained and the need for public health information, the importance of information about the new Coronavirus was found, in addition to more visible knowledge of the disease, contributing to a preventive and broad continuing education, reducing the impacts caused and the overload of health actions.

DESCRIPTORS: Coronavírus. COVID-19. Pandemic.

RESUMEN

El objetivo de este trabajo fue recolectar evidencia científica y verificar manuales, guías, protocolos instruccionales. Método: Esta es una revisión integradora con una selección de 11 artículos disponibles en PUBMED y en revistas internacionales publicadas de enero a abril de 2020. Resultados: Es posible inferir medidas esenciales para minimizar los impactos de la pandemia, al identificar un nuevo coronavirus generó desafíos para contener la transmisión comunitaria ante recursos limitados de salud pública, conocer el perfil de la severidad del virus, desinfectar ambientes, mantener una educación y aislamiento de casos sospechosos. Conclusiones: Con base en la evidencia obtenida y la necesidad de información en salud pública, se encontró la importancia de la información sobre el nuevo Coronavirus, además de un conocimiento más visible de la enfermedad, contribuyendo a una educación continua preventiva y amplia, reduciendo los impactos ocasionados. y la sobrecarga de acciones sanitarias.

DESCRIPTORES: Coronavirus; COVID-19 ; Pandemia.

RESUMO

O objetivo deste trabalho foi reunir evidências científicas e verificar manuais, guias, protocolos instrutivos. Método: Trata-se de uma revisão integrativa com seleção de 11 artigos disponíveis na PUBMED e nos periódicos internacionais publicados em janeiro até abril de 2020. Resultados: É possível inferir medidas essenciais para minimizar os impactos da pandemia, ao identificar um novo coronavírus gerou desafios para conter a transmissão comunitária diante dos recursos limitados da saúde pública, conhecer o perfil da gravidade do vírus, a desinfecção de ambientes, manter uma educação permanente e isolamento dos casos suspeitos. Conclusões: Com base nas evidências obtidas e a necessidade de informação à saúde pública, constatou-se a importância de informações a respeito do novo Coronavírus, além de conhecimentos mais visíveis da doença, contribuindo para uma educação continuada preventiva e ampla, reduzindo os impactos ocasionados e a sobrecarga das ações de saúde.

DESCRITORES: Coronavírus; COVID-19; Pandemia.

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INTRODUCTION

The prevalence of a new type of virus of rapid demographic extension, which generates the pandemic leads us to the search for scientific evidence. In December 2019, China notified the World Health Organization (WHO) outbreaks of hospitalizations of individuals diagnosed with unexplained Pneumonia or SARS-CoV 2, caused by the new Coronavirus, in Wuhan, HUBEI province, causing an emergency health event In March 2020. ¹

Isolated in common, four patients, most of whom were tent workers in the seafood and wild animals market: bats, birds, rabbits, frogs, tigers, among others, when authorities verified evidence that the new Coronavirus, in humans, it was similar to that of the bat. Then, there was a non-human source transmission, and, due to the outbreak, the market was closed to commercialization, on January 1st, 2020, for inspection and environmental sanitation, having not been reopened. ²

According to WHO and the Ministry of Health, the information is being consolidated, adjusted, updated according to evidence-based reports, given the fact, the date of the H1N1 influenza vaccination calendar was anticipated, thus, as health professionals will classify and identify suspected H1N1 and SARS-CoV2 cases, are the risk groups for vaccine coverage the same?

Studies analyzed on different types of materials prove the persistence that the Coronavirus strain can cause while infectious on inanimate surfaces that lasts between two hours and up to nine days, guaranteeing the effectiveness and importance of surface disinfection with biocidal products, 62% ethanol to 71% and sodium hypochlorite 0,1%. ³

Virulence, high transmissibility and a pandemic situation, in addition to the scarce evidence, send countries to request that society be quarantined and socially isolated.

Putting individuals and the population

in movement restriction, quarantine or social isolation, as a way of spreading and preventing the virus, can psychologically affect individuals and health professionals, where most of them presented behaviors of frustration, fear, loneliness, besides the reported suicide cases, showing that the longer the isolation time, the greater the psychological impact. ⁴

The story tells of Public Health in Brazil, which faces weaknesses, mainly within the scope of the SUS, due to the precariousness of the health units, in several regions of Brazil, with regard to the infrastructure, inputs and capacity to face this new virus. In this sense, it is necessary to ask: what scientific information has been gathered so far about COVID-19 and its impact on public health? Are there protocols and SOPs on nursing care for these cases?

This study aims to identify scientific evidence gathered, so far, regarding COVID-19, to verify manuals, guides, instructional protocols and their impacts on Public Health.

METHOD

The present study refers to the Integrative Literature Review, according to Mendes, Silveira and Galvão (2008) is qualified in evidence from existing studies, developed through methodologies, available from different sources, offering researchers the synthesis and extraction of results without affecting the reference of the studies covered and used. This survey took place in the annual period between January and April 2020.

This review was developed through six steps, which are:

First Stage: Designation of the theme and choice of the thesis or research question for the elaboration of the integrative review.

The identification of the theme Coronavirus Pandemic and the impacts on health actions in the first half of 2020, was manifested due to the need for relevant infor-

mation, questioned the urgency of studies regarding the knowledge and conduct of nurses towards this patient, and for verify the clinical management according to the grounded research in order to obtain quality humanized care for the patient.

Second Stage: Definition of measures for the selection of sampling studies or literature search.

The search for the articles was carried out at the source of the digital library of PUBMED in the journals of Jama Network - medical journal - published by the American Medical Association; The Journal Hospital infection, in the official journal of the Hospital Infection Society; The Lancet (Elsevier) - medical journal of Medicine - United Kingdom; New England Journal of Medicine (N ENGL J.MED) of the Massachusetts Medical Society; World Health Organization (WHO); Ministry of Health of Brazil (MS); Federal Nursing Council of Brazil (COFEN). Regarding the survey of articles, the health descriptors (Decs) used were Coronavirus, COVID-19, and pandemic. The chosen Decs are directly related to the proposed theme and are recognized as science descriptors. The inclusion criteria for the present study were articles published between January and April 2020, available in Portuguese and English, translated for the present study, in the research sources already mentioned.

Third Stage: Selection of the content to be used - articles/categorization - in the study.

The information obtained was selected according to these inclusion criteria: title of the article, year, place, journal/magazine, methodology of the articles, results of the studies.

Fourth Stage: Evaluation of the studies included in the Integrative Review.

The studies were evaluated first by their titles, abstracts, objectives, results achieved, thus obtaining a satisfactory and conclusive answer.

Fifth Stage: Interpretation of results.

The results of the articles were obtained through precise reading, concrete interpretation, so that the data could be evaluated and grouped.

Sixth stage: Synthesis of the knowledge evidenced and analyzed in the researched articles and presentation of the Integrative Review.

The information obtained will be demonstrated in the tables below, and discussed with each other. They were demonstrated in two tables (1 and 2), in which the discussion of the data was carried out by dividing the information, in order to allow a better understanding and interpretation. They were ordered by number, reference and results. As for Chart 2, they were ordered by reference and role of the nurse, according to reports of the articles studied.

Table of scientific evidence.

DISCUSSION

Study Profile

To achieve the proposed results, 11 scientific articles were analyzed, chosen by the established inclusion criteria. The selected studies are descriptive and were shown in Table 2. As for the level of evidence of those surveyed, of the 11 scientific studies are classified into two case reports with quasi-experimental study and data obtained systematically (Level 4); three individual experimental case studies (Level 2); a meta-analysis case study (Level 1). (Level three) two strong/moderate quasi-experimental studies, (Level five) one moderate/weak study with a case report, (Level six)

moderate/weak with two references from authorities and legal bodies.

¹¹Li et al. (2020) showed 425 cases of pneumonia with unexplained causes, in Wuhan, China. In the month of December 2019, male individuals were identified, with an average age of 59 years, high spread in the community. In order to identify a new pathogen, the facts point to the need to implement means to prevent approach and guidance with educational health measures. The analyzed study justifies that there was direct or indirect contact of transmission in a community way.

When identifying a new Coronavirus pathogen, which causes severe pneumonia, related to severe acute respiratory syndrome (SARS-CoV-2), it is inferred that there is still no effective vaccine for this new pathology (RALPH et al., 2020).²

Therefore, nursing needs to implement measures and strategies for isolating respiratory contact, handling with the patient, introducing continuing education, assessing the routine of each institution, since the genome of the SARS-CoV-2 virus that causes pneumonia, later called COVID-19 disease.⁵

Containing the spread of COVID-19 ensures control of the outbreak, provided that in a timely manner, where isolation health care should be used and intensified to facilitate treatment, according to signs and symptoms, with greater effectiveness, in the identification in the screening of risk classification, without delays in the isolation of suspected cases.⁶

Nursing requires updating of evidence-based studies, since a new virus causes a public calamity pandemic. Still, it is known that the mechanisms of action, and the pathological characteristics of Coronavirus are highly changeable, and the treatment is poorly evidenced.⁷

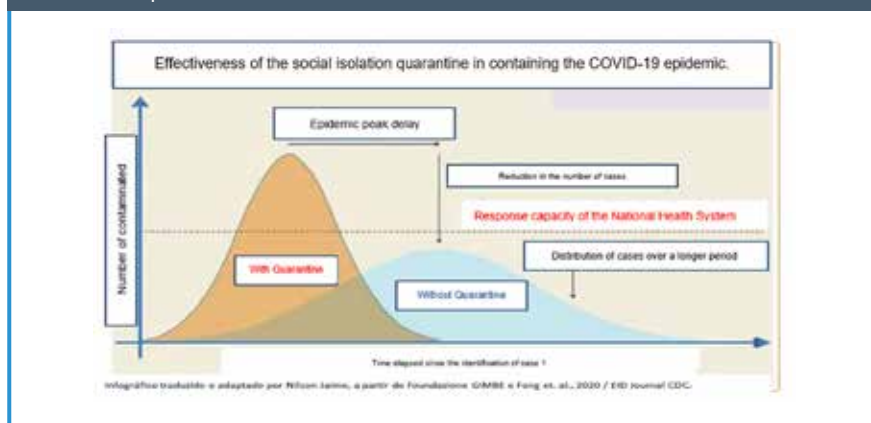
Faced with the pandemic, several countries asked society to quarantine it, a form of social isolation. This strategy is a way to contain the virus and the exposure of uncontaminated individuals with great efficiency as seen in Graph 1. Thus, it is evident that the change causes psychological impacts on the behavior of individuals

Table 01 - Classification of evidence levels

STRENGTH	NÍVEL	PRÁTICA BASEADA EM EVIDÊNCIAS
Strong	1	1 Meta-analysis of multiple controlled studies
Strong/moderate	2	2 Individual experimental study
Strong/moderate	3	3 Quasi-experimental study as a single, non-randomized, controlled group, with pre- and post-tests, or case-control status
Moderate/Weak	4	4 Non-experimental, descriptive correlational, qualitative or case study
Moderate/Weak	5	5 Case report or data obtained systematically, of verifiable quality, or data from evaluation programs
Moderate/Weak	6	6 Opinion of authorities, committees, legal bodies

Source: BRASILEIRO, 2017

Graph 01 – Effectiveness of the social isolation quarantine in containing the COVID-19 epidemic.



Source: WHO (World Health Organization), Coronavirus Resource Center da Johns Hopkins University, Junk Charts, The Economist, CDC (Centers for Disease Control and Prevention) e The New York Times – adapted

such as fear, frustration, loneliness, reports of suicide. And as health professionals, we need to support these individuals in a humanized way.³

The following is a graphic illustrating the effectiveness of the quarantine.

RESULTS

The studies addressed denote the need to implement a new routine, both in the community and in health units. The training of health professionals, their update on the characteristics of the infection of the new Coronavirus, and thus, identifying the severity profile as a way of contributing to better management and control of cases.⁸

Thus, the study observed the emergence of viable medications to minimize the evolution of the disease in the body

- seen in the article previously presented and which reveals chloroquine (CQ) and hydroxychloroquine (HCQ), even though there is no specific medication or vaccine until the present moment. (LIU et al., 2020). According to the Ministry of Health, there are forms of treatment for clinical care for patients with COVID-19, who were on mechanical ventilation, received methylprednisolone and antivirals and, after plasma transfusion, had significant results.⁹

Further studies are still needed to obtain a definitive statement regarding the occurrences. According to the evaluation of a pregnant woman at 34 weeks of gestation, suspected of having contracted SARS-CoV-2, and who had a newborn by cesarean section, born without symptoms, even though she was sent to isolation, without

contact with her mother. The examination of the newborn for COVID-19 was negative, remembering that his IgG and IgM were elevated, even though breast milk was negative.¹⁰

In view of the scientific evidence listed by the studies above, it is possible to infer that essential measures must be taken to minimize the impacts of the pandemic caused by the Coronavirus.

CONCLUSION

It is concluded, based on the evidence obtained, the need to disclose and inform Public Health about the new Coronavirus. Contribute to health professionals with updates for a preventive and broad continuing education, reducing the impacts caused and the burden on health actions. ■

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