Soares, A.J.; Soares, C.F.S.; Santos Silva, F.C.; Ferreira da Silva, A.; Estrela, F.M.; Magalhães, J.R.F.; Oliveira, M.A.S Elements of masculinity that vulnerabilize men to morbimortality by COVID-19: integrative review

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Elements of masculinity that vulnerabilize men to morbimortality by COVID-19: integrative review

Elementos de masculinidad que vulnerabilizan a los hombres a la morbimortalidad por COVID-19: revisión integrativa Elementos da masculinidade que vulnerabilizam homens à morbimortalidade pela COVID-19: revisão integrativa

ABSTRACT

El objetivo fue conocer los elementos de masculinidad que hacen a los hombres vulnerables a la morbilidad y mortalidad por CO-VID-19. Se trata de una revisión integradora, realizada en mayo de 2020, a través de las plataformas Pubcovid-19 y la Biblioteca Virtual en Salud, se utilizaron las siguientes estrategias de búsqueda "Covid" y "Men"; "Covid" y "Hombres" y "Salud"; "Covid" e "Identidad de género", afirman 490 documentos y luego de los criterios de inclusión, totalizaron 07 artículos. Los elementos de masculinidad que incitan a la vulnerabilidad de los hombres a la morbilidad y mortalidad por COVID-19 se refieren a la provisión familiar y la consiguiente exposición ocupacional en el trabajo, estilo de vida poco saludable, expresado por el tabaquismo y el alcoholismo, violación de las reglas de distancia social, descuido de prácticas, medidas preventivas, que reverberan en el sistema inmunológico masculino debilitado. Sin embargo, la literatura también reveló que la falta de búsqueda masculina de servicios de salud influenciada por la convicción de invulnerabilidad y por los discursos políticos que alivian la enfermedad también están influyendo en el aumento de la exposición y mortalidad masculina por COVID-19. El conocimiento de los elementos que favorecen al hombre a la enfermedad y consecuente muerte por la enfermedad, urge que se piense en prevención para este público. **DESCRIPTORS:** Coronavirus Infections; Men's Health; Indicators of Morbidity and Mortality

RESUMEN

The objective was to know the elements of masculinity that make men vulnerable to morbidity and mortality by COVID-19. It is an integrative review, carried out in May 2020, through the Pubcovid-19 platforms and the Virtual Health Library. The following search strategies "Covid" and "Men" were used; "Covid" and "Men" and "Health"; "Covid" and "Gender identity", state 490 documents and after the inclusion criteria, they totaled 07 articles. The elements of masculinity that incite the vulnerability of men to morbidity and mortality by COVID-19 concern family provision and consequent occupational exposure at work, unhealthy lifestyle, expressed by smoking and alcoholism, violation of social distance rules, neglect of practices preventive measures, which reverberate in the weakened male immune system. However, the literature also revealed that the lack of male search for health services influenced by the conviction of invulnerability and by the political discourses that alleviate the disease are also influencing the increase in male exposure and mortality by COVID-19. The knowledge of the elements that favor men to illness and consequent death by the disease, urgent that they be thought of prevention for this public.

DESCRIPTORES: Infecciones por Coronavirus; Salud del Hombre; Indicadores de Morbimortalidad.

RESUMO

Objetivou-se conhecer os elementos da masculinidade que vulnerabilizam homens a morbimortalidade pela COVID-19. Trata-se de uma revisão integrativa, realizada no mês de maio de 2020, por meio das plataformas Pubcovid-19 e a Biblioteca Virtual em Saúde. Utilizou-se as seguintes estratégias de busca "Covid" and "Men"; "Covid" and "Men" and "Health"; "Covid" and "Gender identity", apresentando 490 documentos e após os critérios de inclusão totalizaram 07 artigos. Os elementos da masculinidade que incitam a vulnerabilidade do homem à morbimortalidade pela COVID-19 dizem respeito ao provimento familiar e consequente exposição ocupacional no trabalho, estilo de vida não saudável, expressos pelo tabagismo e alcoolismo, violação das regras de distanciamento social, negligência de práticas preventivas, que reverberam no sistema imunológico masculino mais debilitado. Entretanto à literatura também desvelou que a não busca masculina pelos serviços de saúde influenciado pela convicção de invulnerabilidade e pelos discursos políticos que minoram a doença também são influenciadoras na elevação da exposição e mortalidade masculina pela COVID-19. O conhecimento dos elementos que favorecem os homens ao adoecimento e consequente morte pela doença, urge que sejam pensadas estratégias de prevenção para esse público.

DESCRITORES: COVID-19; Saúde do homem; Indicadores de Morbimortalidade.

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INTRODUCTION

onfiguring itself as a pandemic, which has spread rapidly and ■ devastatingly, COVID-19, caused by SARS-CoV-2, was detected on December 31st, 2019 in Wuhan, China. Due to its rapid speed of spread throughout the world, the World Health Organization (WHO) has declared a Public Health Emergency of International Importance (1), causing, until June 1, 2020, more than 6 million cases and more than 370 thousand deaths distributed worldwide. (2) In Brazil, it is important to consider the ascending and rapid characteristic of the epidemic curve, with more than 391 thousand confirmed cases and more than 24 thousand deaths, until May 26th, 2020 (3), the male audience being the most affected by the disease.

Male morbidity and mortality due to COVID-19 is higher than female morbidity in several countries around the world. Studies reveal that in China, France, Germany, Iran, Italy and South Korea and Brazil about 60% of deaths are male. (4,5) In other epidemics, where infections occurred later than in the Middle East, higher male mortality had already been detected, which reveals a greater male vulnerability to the development of the disease. (6)

The vulnerability in health recognizes that, in view of the social, political-institutional and behavioral dimensions, different people and population groups have different susceptibilities, even if interconnected. Vulnerability starts to be articulated in three axes:

individual, social and programmatic. (7) The individual dimension encompasses the knowledge and behaviors about the problem assumed by the person, in which he/she directs him/her to the risk event. (7) The social dimension relates individual conduct to the characteristics of the social space, such as: life cycle, social identity, social and institutional norms, gender relations, among other aspects. (7) And the pragmatic dimension refers to access to the health system, the actions recommended for the prevention and control of the disease and the social resources existing in the area covered by the health service. (7) It is noteworthy that the concepts of vulnerability were used in their three--dimensionality.

These data may be related to the elements that constitute the process

of formation of male gender identity, since men are socially constructed to occupy public spaces, places that, in the context of the pandemic, are considered locus of transmission.

Furthermore, historically self-care is not a common practice for men who tend to be more exposed to health risk factors, and the search for medical assistance is undertaken in a phase of greater disease severity. (8) Studies reinforce these findings when they reveal that in the Americas men live 5,8 years less than women, considering that they have behaviors that are toxic to their health. (9) In this sense, it looks at health aspects from the perspective of gender as an analytical category that is important when considering the social, productive, political and cultural dimensions, reverberating in health practices and knowledge. (8)

In the current situation, even with the recommendations of the WHO and the Brazilian Ministry of Health for quarantine and social distance, men are the public that is most exposed. A research carried out by the Datafolha Institute reveals that women respect social distancing more than men. (10) This implies that they resist the adoption of self-care practices, neglecting essential preventive hygiene measures during the pandemic, as well as ignoring mild symptoms of the disease and the health authorities' warnings. Thus, there is a research question: What elements of masculinity make men vulnerable to morbidity and mortality by COVID-19?

In this sense, this article aims to: Know the elements of masculinity that make men vulnerable to morbidity and mortality by COVID-19.

METHODS

Study of integrative literature review that allows the synthesis of scientific evidence on a given theme from the search and expanded analysis of a variety of studies. Due to the context of social isolation, which makes it difficult for men to carry out an empirical research, searching the literature through an integrative review allows the compilation of relevant information, favoring the researcher with a more comprehensive understanding of the problem to subsidize the health care practice. In this sense, methodology proposes to point out gaps in knowledge, giving the researcher the direction to the themes that need scientific exploration. (11)

The study followed the six steps recommended to carry out an integrative review, namely: Identification of the theme and selection of the research question; establishment of inclusion and exclusion criteria for the selection of scientific materials; categorization of studies; evaluation of the included studies; interpretation of results and presentation of the knowledge synthesis according to the Revised Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0). (12)

For the first stage, the PICO strategy was used, which represents an acronym for Patient (P), Intervention (I), Comparison (C) and "Outcomes" (O), these being fundamental elements of the research question and the construction of the guiding question of the study. (13) Thus, based on such a

structure, the research was guided by the following question: what elements of masculinity make men vulnerable to morbidity and mortality by CO-VID-19?. It should be noted that we do not consider strand "C", since this study does not propose the development of clinical research, which makes its use unnecessary. (14)

The bibliographic survey was carried out in May 2020, through consultation on the Pubcovid-19 Platform, which is indexed in the United States National Library of Medicine (PUB-MED) and in the Medical Excerpt Database (EMBASE). In addition, a search was made at the Virtual Health Library (VHL), which brings together the main databases that publish on issues relevant to health at national and international level, guaranteeing the variety of results that will be found. To arrive at publications on the theme, we sought to select studies using the Health Sciences Descriptors (DECS): "Covid", "Gender Identity", "Men" and "Health", using the following search strategies "Covid "And" Men "; "Covid" And "Men" And "Health"; "Covid" And "Gender Identity".

The following inclusion criteria were constituted: articles available in full and free of charge that dealt with the theme elements of masculinity that make men vulnerable to morbidity and mortality by COVID-19, published in 2020 and presented in the English language. Thus, articles that did not deal with the theme in vogue or that did not clearly demonstrate the elements relevant to research and gray literature were excluded. The results were sorted by reading the titles and abstracts, performed by three authors independently, adopting peer review. Finally, the evaluations were evaluated by means of content analysis for the survey and synthesis of knowledge.

Table 1: Applicatio	ble 1: Application of the PICO strategy						
ACRONYM	DEFINITION	APPLICATION					
Р	Population	Men					
I	Intervention	COVID- 19					
С	Comparison	Does not apply					
0	Outcome	COVID-19 morbidity and mortality					

RESULTS

The analysis of the data went throu-

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gh the synthesis of the selected studies and the performance of comparisons of the main results that answered the research question. In addition, findings were interpreted based on the theoretical framework of the gender, with a view to discussing masculinities, relating them to the context of the pandemic of COVID-19 and the careless male in relation to their health.

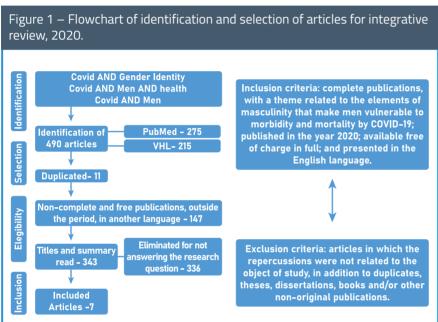
When searching the VHL, 215 articles were obtained. When performing the same search in the PubMed database, 275 articles were obtained, totaling 490 documents. After applying the inclusion and exclusion criteria previously established, 343 documents remained, of which, only 07 addressed the central theme of the research and were part of the construction of the study.

It is noteworthy that the selection was guided by a checklist prepared by the research authors with relevant information from the articles. The process of identifying and selecting the studies followed the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) (15) as shown in

Based on the seven selected publications, a table was developed exposing the characteristics of these publications according to title, authorship, year of publication, country, journal, methodology adopted in the study and the results found among the

figure 1 below: analyzed articles. DISCUSSION

According to the researched scientific literature, one of the elements



Source: Own authorship, 2020.

Ν°	TITLE	AUTHORS, YEAR, JOURNAL, COUNTRY	METHOD	RESULTS
1	Sex Differences in Mortality from COVID-19 Pandemic: Are Men Vulnerable and Women Protected? ⁽¹⁶⁾	Sharma G, Volgman AS, Michos ED. 2020 JACC Case Rep, U.S.A.	Case study	- Pre-existing diseases; - Smoking and excessive alcohol consumption; -Family support and consequent occupational exposure at work; -Negligence to preventive hygiene measures; - They seek less health services.
2	Impact of sex and gender on COVID-19 outcomes in Europe ⁽¹⁷⁾	Gebhard C, Regitz-Zagrosek V, Neuhauser HK, Morgan R, Klein SL. 2020 Biol Sex Differ, England	Narrative review	- Smoking and excessive alcohol consumption; - Neglects preventive hygiene measures; - They seek less health services; - rejection of social distance, -Family support and consequent occupational exposure at work;
3	Men hit harder by covid-19 ⁽¹⁸⁾	Lawton G. 2020 New Sci, England	Narrative review	- Smoking; - Pre-existing diseases; - Neglect preventive hygiene measures - Fragile immune system
4	Are we equal in adversity? Does Covid-19 affect women and men differently? ⁽¹⁹⁾	Serge R, Vandromme J, Charlotte M 2020 Ireland	Reflection	- Fragile immune system - Neglect preventive hygiene measures - Smoking - Pre-existing diseases

5	Men and COVID-19: Adding a gender lens ⁽²⁰⁾	Betron M, Gottert A, Pulerwitz J, Shattuck D, Stevanovic-Fenn N 2020 Glob Public Health; U.K.	Reflection	Smoking and excessive alcohol consumption; - Pre-existing diseases; -Negligence to preventive hygiene measures
6	COVID-19: the gendered impacts of the outbreak ⁽²¹⁾	Wenham C, Smith J, Morgan R. 2020 Lancet; U.K.	Narrative review	- Fragile immune system; - Smoking.
7	COVID-19 Worries and Beha- vior Changes in Older and Younger Men and Women ⁽²²⁾	Barber SJ, Kim H 2020 J Gerontol B Psychol Sci Soc Sci; U.S.A.	Quantitative study	-Negligence to changes in behavior to comply with preventive measures -Hormonal issues and weaker immune system

of masculinity that incites the vulnerability of men to morbidity and mortality by COVID-19 is related to family provision and their consequent exposure to work activities, which increases the risk of contagion by COVID-19. This context is related to the fact that men are socially constructed to occupy public spaces in an attempt to provide for the financial demands of the home. (23)

Such perspective is pointed out in national and international studies when they denote that from an early age boys are encouraged to occupy public spaces through exposure from childhood games to subjective symbols that instigate the freedom to come and go as well as the importance of paid work. (16,17) In the current situation, being in public spaces for the development of any activity, be it work or laser, exposes the male population to illness to COVID-19, which denotes the multi determination of the concept of vulnerability.

In the current situation, being in public spaces for the development of any activity, be it work or laser, exposes the male population to illness to COVID-19, which denotes the multi determination of the concept of vulnerability. (16,17,18,19,20,21) The social coexistence with these substances is ancient and cultural, being associated with social events. In addition, its consumption refers to pleasurable situations, of joy and belonging to attractive social groups, facilitating the process, mainly male, of gregariousness with other men. (24) Faced with

the context of the pandemic, where there is a need for social distance, men are unable to socialize in bars and/or restaurants, making them seek other strategies for this, often opting for the organization of private parties with several people.

This socialization, and consequent violation of the rules of social distance, reveal male negligence and the preventive practices internationally advocated against COVID-19. Therefore, the male population is resistant to the fulfillment of social distance, rejecting not only the need to isolate themselves, but also the hygiene guidelines with hand washing and the use of alcohol gel. And this reinforces even more the carelessness with health on the part of men. (16,17,19,22,25) Male identity has always been associated with carelessness in appearance, clothing and hygiene, given its connotation to virility and heterosexuality, considering such care to be strictly feminine, however, in contemporary times, these behaviors have changed. (26) Despite this, many men still associate the adoption of hygiene and care habits with the connotation of a possible homosexuality. (27) This context reveals the vulnerability axis aimed at the social field, since this is related to individual behaviors that directly affect all social contexts of that individual. In this sense, in the current situation in which the adoption of these habits is ideal for combating and controlling COVID-19, by ignoring these cleanliness practices, this population is susceptible to illness.

All these negligent behaviors, added to the unhealthy lifestyle, further weaken the male immune system, favoring the progression and adverse results of the new coronavirus, as shown in the selected literature. Evidence suggests substantial differences in the immune system between the sexes, in which women develop stronger immune defenses due to hormonal issues that play an essential role in the body's innate and adaptive immunity to a range of infectious diseases. (18-21) Therefore, associated with high exposure to pathogens, frequent illness and low quality of life, it is found that pre-existing health conditions that are fundamental to the worsening of Covid-19 symptoms are more prevalent and incident in males. (16,17-20)

The connotation of masculinity to invulnerability, socially constructed and apprehended by men is a catalyst for the carelessness of men with their health, favoring the failure to recognize situations of alertness and the need to seek care from health services. The male difficulty in seeking medical assistance is mostly related to the fact that the functioning of health services collides with men's working hours. (29) In addition, seeking health care denotes fragility, considering that the social role of masculinity is based on strength and invulnerability, which makes it difficult to recognize your health care needs. (30)

In addition to the biological differences between men and women, the political discourse of abbreviation of the severity of symptoms, associa-

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ting it with a "little grip", emerges in the population, especially the male, the discredit to the care that must be taken, as well as to the lethality of the disease. The literature portrays that in the face of reality, political leaders have a fundamental role in transmitting information to the population regarding the disease. When these do not act in accordance with the real situation presented, they generate a feeling of incompetence and lack of discernment as to the importance of science in detriment to the guidelines given in an attempt to mitigate the economic effects to the detriment of quarantine regimes. (31)

This situation makes men underestimate the severity of the virus considering the mild symptoms initially present. However, COVID-19 is rapidly evolving, leading any individual, whether male or female, to symptoms of severity of symptoms, considering a series of individual clinical circumstances that interfere in this process, requiring intensive care, mainly due to respiratory complications. (31) In the meantime, according to international bodies, although individual factors are considered, men are more likely to develop the most serious form of COVID-19, requiring intensive care, and the virus's lethality is more likely. (19,33,34)

This scenario reveals the importance of recognizing the impact of COVID-19 on men's health, with the strengthening of prevention and awareness strategies for this public regarding the severity of this disease being of fundamental importance.

CONCLUSION

According to the scientific literature explored, the elements of masculinity that incite the vulnerability of men to morbidity and mortality by COVID-19 concern family provision and its consequent occupational exposure at work, unhealthy lifestyle (expressed by smoking and alcoholism), violation of the rules of social detachment, neglect of preventive practices such as hand washing, which reverberate in the most weakened male immune system. However, the literature also revealed that the lack of male search for health services influenced by the conviction of invulnerability and by the political discourses that alleviate the disease are also influencing the increase in male exposure and mortality by COVID-19.

One of the limitations of the study refers to the number of articles selected methodologically relating the elements of masculinity that make men vulnerable to morbidity and mortality by COVID-19, since most studies address epidemiological issues, which requires studies on this theme.

With the knowledge of the elements that favor men to illness and the consequent death from the disease, it is urgent that prevention strategies for this public be considered. Among them, the incentive to change risk factors, incentive to seek health services and guidelines for hand hygiene measures, the use of masks at work to minimize the transmission of the virus to this public.

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