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Health care workers and the intersection of spirituality and mortality in the context of COVID-19

Trabalhadores de saúde e o atravessamento da espiritualidade e finitude no contexto da COVID-19

Trabajadores de salud y el cruce de la espiritualidad y finitud en el contexto de COVID-19

Mikaelli Curinga de Souza 📵

Universidade do Estado do Rio Grande do Norte (UERN) - Mossoró (RN) - Brazil

Rita de Cássia da Silva Medeiros 🕞

Universidade do Estado do Rio Grande do Norte (UERN) - Mossoró (RN) - Brazil

Álvaro Micael Duarte Fonseca 🛈

Universidade do Estado do Rio Grande do Norte (UERN) - Mossoró (RN) - Brazil

Ana Karoline Lima Costa e Silva 🔟

Universidade do Estado do Rio Grande do Norte (UERN) - Mossoró (RN) - Brazil

José Antonio da Silva Júnior 🝺

Universidade do Estado do Rio Grande do Norte (UERN) - Mossoró (RN) - Brazil

Ysabele Yngrydh Valente Silva 🗊

Universidade do Estado do Rio Grande do Norte (UERN) - Mossoró (RN) - Brazil

Ellany Gurgel Cosme do Nascimento in

Universidade do Estado do Rio Grande do Norte (UERN) - Mossoró (RN) - Brazil

## **ABSTRACT**

**Objective:** This study aimed to explore the perceptions of frontline health care workers during the COVID-19 pandemic regarding their experiences with spirituality and mortality. **Method:** A descriptive, qualitative approach was used to collect testimonials from 274 health care workers at public health facilities in Mossoró, Rio Grande do Norte (RN), Brazil, between February and June 2021. Data were analyzed using Bardin's Thematic Content Analysis method. **Results:** Two primary categories emerged from the narratives: mortality and spirituality. Discussions of mortality underscored the fragility and inherent uncertainty of human life, fostering a heightened awareness of death. This awareness influenced interpersonal relationships and encouraged greater appreciation for the present moment. Conversely, spirituality was recognized as a valuable coping strategy, aiding in stress reduction and enhancing both physical and mental well-being. Additionally, it played a significant role in humanization, fostering deeper connections and strengthening bonds among individuals. **Conclusions:** Categories reflect participants' experiences and insights, shedding light on the profound subjective impacts of the COVID-19 pandemic. These dimensions were crucial in assisting health care workers in reframing and navigating their experiences during this challenging time.

**Descriptors:** COVID-19; SARS-CoV-2; Health care Personnel; Spirituality.

## **RESUMO**

**Objetivo:** Este estudo teve como objetivo explorar as percepções dos trabalhadores de saúde da linha de frente durante a pandemia de COVID-19 em relação às suas experiências com espiritualidade e mortalidade. **Método:** Foi utilizada uma abordagem qualitativa e descritiva para coletar depoimentos de 274 trabalhadores de saúde em unidades públicas de saúde em Mossoró, Rio Grande do Norte (RN), Brasil, entre fevereiro e junho de 2021. Os dados foram analisados por meio do método de Análise de



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Conteúdo Temática de Bardin. **Resultados:** Das narrativas emergiram duas categorias principais: finitude e espiritualidade. As discussões sobre finitude destacaram a fragilidade e a incerteza inerente da vida humana, promovendo uma maior consciência sobre a morte. Essa consciência influenciou os relacionamentos interpessoais e incentivou uma maior valorização do momento presente. Em contrapartida, a espiritualidade foi reconhecida como uma estratégia valiosa de enfrentamento, auxiliando na redução do estresse e no aprimoramento do bem-estar físico e mental. Além disso, desempenhou um papel importante na humanização, fortalecendo conexões e vínculos entre as pessoas. **Conclusões:** As categorias refletem as experiências e perspectivas dos participantes, destacando os profundos impactos subjetivos da pandemia de COVID-19. Essas dimensões foram cruciais para ajudar os trabalhadores de saúde a ressignificar e lidar com suas experiências durante este período desafiador.

Descritores: COVID-19; SARS-CoV-2; Pessoal da Saúde; Espiritualidade.

#### RESUMEN

Objetivo: Analizar la percepción de los trabajadores de salud, mientras actuantes en la primera línea en la pandemia de COVID-19, sobre los cruces experimentados a partir de la espiritualidad y la finitud de la vida. Método: Se trata de un estudio descriptivo, de enfoque cualitativo, desarrollado entre febrero y junio de 2021, a partir de declaración de 274 trabajadores de salud inseridos en los equipos de salud pública del municipio de Mossoró/RN. Para el análisis de los datos, se adoptó el Análisis de Contenido Temático, de Bardin. Resultados: Ante los discursos colectados, fueron delimitados dos categorías para las reflexiones: finitud y espiritualidad. La finitud fue relacionada a las características de fragilidad humana, incertidumbre de la vida y la consciencia de muerte, impactando las relaciones interpersonales y promocionando una valoración del momento presente. La espiritualidad fue indicada como estrategia útil en disminuir niveles de estrés y aumentar el bienestar físico y mental, siendo un recurso que contribuye con la humanización, conectando y acercando sujetos. Conclusiones: Las categorías sinterizaron las experiencias y reflexiones de los participantes, evidenciando los impactos subjetivos de la pandemia y demostrando cómo estas dimensiones contribuyeron para la resignificación de sus experiencias.

Descriptores: COVID-19; SARS-CoV-2; Personal de salud; Espiritualidad.

### INTRODUCTION

In december 2019, the SARS-CoV-2 virus was first identified in Wuhan, China, with early cases linked to a seafood market<sup>(1)</sup>. On February 11, 2020, the World Health Organization (WHO) officially designated the disease caused by SARS-CoV-2 as coronavirus disease 2019 (COVID-19). Just one month later, on March 11, 2020, the outbreak was declared a pandemic<sup>(2)</sup>. The rapid and widespread transmission of the virus plunged the world into an unprecedented global health crisis<sup>(3)</sup>.

Prioritizing health promotion and disease prevention among frontline health care workers was crucial to mitigating the negative impacts of the COVID-19 pandemic. This global crisis not only caused collective trauma but also directly affected the performance of these professionals. In this context, posttraumatic growth (i.e., a subjective experience of psychological change resulting from a traumatic event) emerges as a relevant concept. Posttraumatic growth includes changes across five key dimensions: relationships with others, new possibilities, personal strength, spiritual transformation, and a deeper appreciation of life<sup>(2,4)</sup>.

Spirituality, incorporated into the multidimensional concept of health by the WHO in 1988, encompasses elements such as the meaning and purpose of life. It is also recognized as a valuable practice for coping with traumatic experiences. By promoting personal well-being, spirituality has a direct impact on physiological changes, influencing physical health, disease risk, and treatment outcomes<sup>(5)</sup>.

Life and mortality are intrinsic aspects of every individual's conscious journey. However, this universal reality frequently brings considerable physical and emotional suffering, often couplet with a sense of powerlessness in the face of death. For health care workers, mortality profoundly impacts their professional and personal lives. While they dedicate themselves to preserving their patients' lives, they also face challenges in their own. This is particularly evident because of the inherent fragility and uncertainty<sup>(6)</sup> that mortality entails.

The COVID-19 pandemic had a profound impact on the experiences of frontline public health care workers. As a result, examining their perceptions of the intersection between spirituality and mortality is critically important. This analysis can uncover factors that aid in coping with the challenges they faced, while also contributing to the enhancement of their emotional and psychological well-being.

This study aimed to analyze the perceptions of frontline health care workers during the COVID-19 pandemic, focusing on their experiences with spirituality and mortality.

### **METHODS**

This is a qualitative, descriptive, exploratory study is based on a subset of data from the research project titled "Incidence of Burnout Syndrome in health care professionals and workers on the front lines combating the COVID-19 pandemic."

The study was conducted using testimonials from health care workers at public health facilities in the city of Mossoró, state of Rio Grande do Norte (RN). According to the 2022 demographic census, Mossoró has a population of 264,577 inhabitants<sup>(7)</sup>. Mossoró has 46 basic health units (BHUs), two state hospitals, and three emergency care units (ECUs)<sup>(8)</sup>.

The study included workers from public health care facilities who provided care to patients with COVID-19, regardless of their employment status as permanent or temporary contract employees, totaling 2,440 workers. Health care workers on leave due to isolation following SARS-CoV-2 infection were excluded from the study.

Data collection was conducted between February and June 2021 using self-administered questionnaires distributed through email, WhatsApp, or in printed form at health facilities. Participants who agreed to take part were given a specified deadline to submit their responses.

The questionnaire comprised two sections. The first section focused on the socioeconomic characterization of participants, addressing variables such as age, gender, skin color, marital status, education level, and profession. The second section included five open-ended questions exploring the psychosocial impact of the pandemic on health care workers' lives. These questions were: "With the onset of the pandemic, have there been positive changes in your personal and professional life? If so, what are they?"; "What were the negative impacts caused by the pandemic?"; "Did the COVID-19 pandemic bring fears? Which ones?"; "What did the COVID-19 pandemic change in your daily routine?"; "What life lessons can the COVID-19 pandemic teach us?." For this article, the answers to the last question were selected.

Thematic content analysis was employed to analyze the data. This method involves a set of techniques designed to systematically and objectively examine communication, extracting descriptive insights from the content of messages. Its primary goal is to identify indicators that enable inferences about the conditions under which these messages were produced (inferred variables)<sup>(9)</sup>.

After the researchers manually reviewed the material by analyzing the subjective responses in the questionnaires, the corpus was compiled. This collection of documents, containing the participants' statements, served as the basis for analysis in this study.

During the data processing phase, the collected information was organized and systematized, converting raw data into analytical categories. This process included the creation of tables to present the results in a more accessible format. In the subsequent inference and interpretation phase, the researchers established relationships among the categories and identified patterns and trends within the data. These emerging meanings were then interpreted in alignment with the research objectives, providing a deeper, more contextualized understanding of the findings.

As the COVID-19 pandemic worsened, field data collection became unfeasible following the issuance of Order No. 758 by the State Health Secretariat of RN (SESAP) on March 18, 2020. Consequently, the administration of questionnaires was adapted to a virtual format using Google Forms, as researchers were unable to visit hospital facilities.

The study adhered to the ethical and legal principles outlined in Resolution No. 466/2012 of the Brazilian National Health Council. All participants signed the Informed Consent Form (ICF). The research project received approval from the Human Research Ethics Committee (REC) of the State University of Rio Grande do Norte (UERN) under CAAE No. 38154620.6.0000.5294 and Opinion No. 4.357.01.

To maintain participant anonymity, individuals were identified alphanumerically using "P," representing the first letter of "participant," followed by a number corresponding to the order in which their questionnaire was received.

### **RESULTS**

Results of this study are based on a subset of data from the research project titled "Incidence of Burnout Syndrome in health care professionals and workers on the front lines combating the COVID-19 pandemic." Providing a detailed description of the participants is crucial for ensuring a clear understanding and proper contextualization of the data.

A total of 274 individuals participated in the study, including nurses, nursing technicians, physicians, physical therapists, social workers, dentists, community health agents, general service assistants, and psychologists. Their ages ranged from 20 to 68 years, with a mean age of  $41.1 \pm 10.5$  years. Of the participants, 205 (74.8%) identified

as women and 69 (25.2%) as men. Regarding marital status, 107 (61.3%) were married or cohabiting, 78 (28.5%) were single, 27 (9.9%) were divorced, and 1 (0.4%) was widowed. Most participants (207, 75.5%) had children. Additionally, 158 (57.7%) reported not contracting COVID-19, and 193 (70.4%) stated that no family members they lived with had been infected.

Results from the second phase of this research, which examined the psychosocial impact of the pandemic on the lives of health care workers, are presented below. The analysis revealed two key categories: mortality and spirituality.

## **Mortality**

The ongoing threat to health, combined with increased losses and social isolation, has sparked a collective reflection on the fragility of life. This situation has heightened awareness of the importance of mental health, solidarity, and resilience in overcoming adversity. Confronting human mortality in this context has also prompted a reevaluation of values and a deeper search for meaning in everyday life.

## Fragile being

Workers conveyed the sense of powerlessness felt by professionals during the pandemic, highlighting human fragility with phrases such as "dust" and "we are nothing." The spread of the virus and the continuous news coverage regarding the impacts of COVID-19 heightened awareness of human vulnerability. The uncertainties surrounding health and the risk of contracting severe illness prompted many to contemplate the fragility of existence.

That we are more vulnerable than we thought, that we need to better appreciate life and our families, and that we must adopt preventive and hygiene measures, as well as personal protective equipment (PPE), as part of our routine. (P23)

That we are nothing and no better than anyone else. We are equals, dust, and nothing more. (P37)

That we are dust, very fragile, and that we must put ourselves in others' shoes, be more empathetic, and remember that we are not better than anyone. (P51)

## Uncertainty about the future

Some workers also shared their insecurities during the pandemic, expressing feelings of uncertainty about the future and life itself. The pandemic introduced numerous uncertainties that disrupted daily routines and activities. Sudden changes in work dynamics, everyday tasks, and the necessity to adapt to new forms of social interaction heightened the sense of unpredictability, reshaping individual perspectives on stability and security in daily life.

To value life and family more, focusing on emotional bonds. Try to make time for leisure and family, dedicate more to family, because we don't know how long we will have them. (P4)

We exist today, and who knows about tomorrow?! (P77)

Never leave for tomorrow what you can do today! Make the most of the good moments in life! We don't know what tomorrow holds! (P200)

### Awareness of death and appreciation of life

Due to the high mortality rates caused by the virus prior to mass vaccination, health care workers' accounts reflect an increased awareness of death, which fostered a deeper appreciation for life, the present moment, and interpersonal relationships. This awareness underscored the importance of social connections and emotional support. Recognizing the finiteness of life instilled a sense of urgency among participants to cultivate meaningful relationships and cherish moments with their loved ones.

We must value life more because, at any moment, we may leave this world without warning. (P11)

Love for others, knowing that we're just passing through here, and it's not worth being selfish or treating others poorly. We were all in the same boat. (P27)

Every second of our lives is valuable. We need to live it intensely every single day. (P29)

We must live each day as if it were the last because we don't know if we'll be here tomorrow. So love more, hug more, and tell people how important they are to you and how much you love them. (P120)

## **Spirituality**

Spirituality played a central role during the global crisis, providing emotional refuge and a deep sense of meaning. Amid uncertainty, grief, and isolation, many turned to spiritual practices, beliefs, and values for comfort. For some, it has become a vital source of inner strength, providing not only emotional support but also a broader perspective on life and existence.

Religious and spiritual rituals, even when adapted to virtual formats, played a crucial role in fostering community connections and building resilience among participants. The COVID-19 pandemic underscored the importance of understanding and embracing the spiritual dimensions of human experience, revealing faith and spirituality as vital resources for navigating unprecedented challenges.

# Divinity and resilience

Participants' accounts emphasized how belief in a higher power helped them cope with adversity, offering wisdom and meaning to their experiences. This belief became a catalyst for resilience and perseverance, empowering them to navigate difficult circumstances. Moreover, spirituality provided a space for personal reflection, enabling health care workers to process their experiences, reflect on their roles as caregivers, and grapple with the profound challenges of confronting loss and human suffering.

Love God and trust in Him above all things; we are not capable of changing anything without God's powerful hand in our lives. We can do nothing without Him. Believe that God is always in control of everything. (P50)

The importance of living our days being useful to a cause or someone, understanding that we are neither better nor worse than anyone, and that there is a powerful God who governs everything. (P68)

Value people more than things, understand that only God's Kingdom can solve our problems, and take care of mental health—it is important. (P132)

## Faith and hope

Faith and hope became essential psychological shields for healthcare workers during the alarming context of the COVID-19 pandemic. Faced with high contagion rates, rising mortality, and the urgent need for solutions to save lives, many turned to faith as a source of comfort and resilience. Participants reported intensifying their religious practices and devotions to cope with the fear, anxiety, and grief that accompanied the crisis. These practices not only provided solace but also served as a vital source of inner strength.

Ser resiliente, ver o lado positivo mesmo diante de tantas situações tristes, valorizar a família e a importância do outro. (P20)

Aumento de uma esperança, de que poderá haver uma cura. (P32)

Que a fé é tão importante quanto a ciência. (P88)

### Connection with others

Participants emphasized the importance of humility and empathy and advocated for a society in which everyone is treated with equality, respect, and care. They highlighted the necessity of prioritizing the collective good and the value of social relationships and emotional support. This perspective fostered a sense of urgency to cultivate meaningful connections and cherish moments spent with loved ones.

It taught us to take better care of ourselves, to be more cautious, to value our own lives, family, and friends; it brought families closer together. (P12)

That empathy for others is necessary, care is not only for yourself but for everyone. Love is much greater than physical presence, and we need to think and act collectively, and we need serious representatives. (P94)

Value the small things and trust in our ability to face adverse situations, always working collectively for the good of all. (P134)

# DISCUSSION

Health care workers faced significant emotional and psychological challenges during the COVID-19 pandemic, many of which were intensified by the structure and limitations of the Brazilian Unified Health System (SUS). While

the SUS is recognized for its broad coverage and commitment to equitable health care access, the health crisis revealed long-standing vulnerabilities. These included an overwhelming patient load, overburdened services, the emotional strain of frequent deaths, the inability to provide the desired level of care, and the psychological toll of constant exposure to infection risks. Collectively, these factors created a situation of extreme emotional vulnerability<sup>(10)</sup>.

In this study, characteristics such as human fragility, the transience of life, and uncertainty about the future—identified by the challenges of the COVID-19 pandemic—are grouped under the category of mortality. According to Rupprecht et al.<sup>(11)</sup>, mortality is related to death anxiety, an emotional response to the awareness of life's finiteness. As Zenevicz et al.<sup>(12)</sup> argue, this heightened awareness of mortality, often triggered by witnessing a patient's death, compels individuals to confront life's urgency and inherent conflicts, leading to reflections on the very meaning of existence.

According to Paula et al.<sup>(13)</sup>, the fear of death and infection by COVID-19 has affected people worldwide, particularly frontline workers. According to Hart<sup>(14)</sup>, within hospital settings, feelings of transience, mortality, vulnerability, and powerlessness were especially pronounced, which aligns with the perceptions of participants in this study. Statements of participants P77 and P200 show a clear expression of uncertainty regarding the future and life itself, an aspect closely linked to a heightened appreciation for the present moment and interpersonal relationships, a pattern observed among multiple participants in this research.

A systematic review and meta-analysis by Luo et al.<sup>(15)</sup> found that the COVID-19 pandemic had a significant impact not only on frontline health care workers but also on the overall public and patients with preexisting conditions or COVID-19 itself. Anxiety and depression were the most reported psychological effects across the studies. However, even in times of suffering, crisis, or adversity, maintaining a cheerful disposition is a character trait that can foster resilience during distress<sup>(4)</sup>. Wong and Bowers<sup>(16)</sup> further describe this as a means of transforming tragedy into an opportunity for personal growth and transformation.

Consistent with Margetic et al.<sup>(17)</sup>, the diverse human responses and reactions to the COVID-19 pandemic observed in this study underscore participants' resilience and heightened awareness of life's fragility. Kowalczyk et al.<sup>(18)</sup> found that individuals adopt various survival strategies when faced with such circumstances, including faith, which helps sustain hope and provides a sense of security. Participant P20 stresses the importance of resilience and the ability to find a positive perspective, even in the face of adversity and grief.

Spirituality encompasses reflections on faith and religiosity, emphasizing both a connection with God and a sense of community. Spirituality also includes feelings of faith and hope that have provided support for health care workers in their fight against COVID-19.

While closely related, religion, religiosity, and spirituality are distinct concepts that can be challenging to differentiate<sup>(19)</sup>. According to Oman<sup>(20)</sup>, religion is one of the oldest human constructs and has maintained a relatively stable definition over time. Spirituality, on the other hand, is viewed as a personal journey of self-discovery, allowing individuals to experience a transcendent sense of meaning and foster connections with others and the world around them. Spirituality can be understood as the pursuit of the sacred, whether through God, nature, or family. As such, it serves as a valuable tool in the search for meaning, significance, and purpose in life<sup>(21)</sup>.

Coping with the COVID-19 pandemic through religiosity involves relying on spirituality and faith as strategies for coping with stress and mitigating the negative impacts of adversity. In many cases, religiosity and spirituality are the only sources of support in highly stressful situations. However, there is a significant lack of religious support services in hospitals that accommodate diverse beliefs. This underscores the importance of collaboration between health care professionals and religious representatives, whether affiliated with hospital facilities or not. Such teamwork aims to provide holistic patient care<sup>(22)</sup> in accordance with the biopsychosocial-spiritual perspective<sup>(23)</sup>.

According to Koening<sup>(5)</sup>, social distancing—a defining feature of the pandemic—provided an opportunity to deepen one's relationship with God through personal religious practices. For participant P98, silence serves as a means of communicating with God, offering a unique way to seek guidance for daily actions. Thus, religious beliefs can also help alleviate the fear of death and foster its acceptance. As noted by Pirutinsky et al.<sup>(24)</sup>, trust in God is strongly associated with lower stress levels and a greater sense of well-being.

According to Mishra et al.<sup>(25)</sup>, spirituality is often understood as the pursuit of a "higher meaning" that extends beyond religion or belief in God. Roman et al.<sup>(26)</sup> found spirituality as a fundamental aspect of human care that plays a vital role in the health and well-being of families, patients, and health care workers. Spirituality is expressed through compassion and empathy, which are closely linked to the reduction of stress, distress, and anxiety during critical periods.

Furthermore, spirituality is recognized as a powerful and humanizing force, fostering reconnections among individuals, contexts, and processes within a shared developmental framework<sup>(27)</sup>. In this study, participants stress

that belief in a higher power is a key factor in problem-solving, as it encourages reflection on the importance of caring for others and the necessity of individual actions that contribute to collective well-being.

According to Nascimento and Caldas<sup>(28)</sup>, health care workers often cite spirituality as a crucial resource for coping with extreme situations while maintaining their ethical and professional commitment. It is recognized as a key component in promoting mental health and is integrated as a fundamental element of comprehensive health care.

Religiosity and spirituality are fundamental tools for promoting both health care workers' well-being and their professional practice. These concepts offer a more humanized perspective that goes beyond scientific rationality, as they provide meaning to life and its finitude on both individual and collective levels. Recognized as essential resources, they play a crucial role in coping with illness and life-threatening circumstances<sup>(29)</sup>.

Developing spirituality to benefit the community helps reduce distress and panic, particularly among health care workers during the COVID-19 pandemic. Spirituality fosters greater attentiveness and appreciation for others while encouraging a shift away from individualistic aspirations. Importantly, it does not interfere with the understanding of preventive and protective measures or adherence to established health care protocols<sup>(30,31)</sup>.

According to Ndumbe-eyoh et al. (32), the impact of a collective sense fosters responses that help address the diverse needs of intersectional communities by providing services and support even in the face of severe challenges posed by COVID-19. Given the potential for future pandemics, learning from the COVID-19 experience is essential for strengthening preparedness. As cases of illness rise, treatment resources may become strained, and the increased threat to life could present significant challenges in delivering adequate support. Therefore, recognizing these lessons is crucial for enhancing coping strategies and improving future responses.

### CONCLUSION

This study successfully achieved its aim of identifying the perceptions of frontline health care workers regarding the intersection of mortality and spirituality during the COVID-19 pandemic. The categories of mortality and spirituality encapsulated the participants' experiences and reflections, illuminating the subjective impact of the COVID-19 pandemic and how these concepts helped them reframe their experiences.

Although respondents associated mortality with human fragility, the uncertainty of life, and an awareness of death, it is important to note its protective role in coping with the COVID-19 pandemic. This awareness encouraged reflection on various aspects of life, fostered a deeper appreciation for the present moment, strengthened interpersonal relationships, and reinforced the importance of caring for others.

Spirituality has been recognized as an effective strategy for reducing stress and enhancing both physical and mental well-being during the pandemic. Spirituality serves as a valuable resource for promoting human connections by fostering relationships between individuals. Furthermore, it can influence the understanding of preventive and protective measures that benefit the community, even during times of significant social upheaval, such as the COVID-19 pandemic.

Moreover, awareness of mortality and spirituality can help restore a sense of purpose in life, serving as a foundation for the mental health and performance of health care workers. This underscores the importance of teamwork in delivering comprehensive care for both patients and caregivers, thereby fostering hope, comfort, perseverance, optimism, and support for everyone involved in the healing process and in coping with critical situations.

Finally, this study underscores the need for further research that investigates both the professional and personal experiences of health care workers as well as examines the impact of multidimensional approaches to health care, which include the role of spirituality at different levels of patient care. Such research would enable the application of lessons learned in future adverse events, whether they are local or global.

#### **CONFLICT OF INTEREST**

The authors declare no conflicts of interest.

## CONTRIBUTIONS

Mikaelli Curinga de Souza, Rita de Cássia da Silva Medeiros e Ellany Gurgel Cosme do Nascimento contributed to the design and conceptualization of the study, data acquisition, analysis and interpretation, and manuscript drafting. Álvaro Micael Duarte Fonseca, Ana Karoline Lima Costa e Silva, José Antonio da Silva Júnior e Ysabele Yngrydh Valente Silva contributed to data analysis, interpretation, and manuscript drafting/review.

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# First author and correspondence address

Mikaelli Curinga de Souza Universidade do Estado do Rio Grande do Norte (UERN) Rua Atirador Miguel Antônio da Silva, SN

Bairro: Aeroporto

CEP: 59607-360 / Mossoró (RN) – Brasil E-mail: mikaellicuringa@gmail.com

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