

SKIN DISORDERS CAUSED AFTER COVID-19 IN HEALTH PROFESSIONALS IN SÃO LUÍS-MA

Julia de Aguiar Baldez Sousa

Specialist in aesthetics and applied cosmetics

Maryângela Godinho Pereira Bena

Master in Environment, Occupational Nurse, post-graduated in Family Health and Management and teaching in higher education

Klecia de Sousa Marques da Silva

Master in Adult Health

Alanildes Silva Bena

Master in Environment, Postgraduate in Intensive Care Unit

***Mirian Tereza Holanda Cavalcanti de
Andrade Belfort Gomes***

Master's Degree in Management of Health Programs and Services

Maria Tereza Martins Silva

Specialist in dermoesthetics and applied cosmetics

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Abstract: Covid-19 emerged in December 2019 in China, where it spread across the world, quickly becoming a pandemic that affected countless sectors, the entire population had to adapt to this new reality, among them professionals in the area of health workers had to redouble in several to meet the needs of hospitals and provide assistance to all those infected, spending most of the day inside their workplaces. The objective of this study was to seek reports from health professionals who had to act on the front line in the fight against the virus and were infected, and to observe the cutaneous manifestations after the disease had affected. For data collection, a questionnaire consisting of 20 closed and open questions was applied about possible skin conditions in health professionals in São Luís-MA after Covid-19, The objective of this work was to identify through research the possible causes of these changes in the skin. In view of the data obtained, we observed the appearance of acne, reddish spots, itching and flaking, the manifestations occurred in different periods, several factors may have triggered these conditions, among them are the prolonged use of PPE's, frequent hand washing, associated with medication use and psychological symptoms due to extreme pressure within hospital environments.

Keywords: Skin disorders; Covid-19; epi's.

INTRODUCTION

The new Coronavirus pandemic emerged on December 31, 2019, in Wuhan, China, and had a great impact on the entire world. The virus spread quickly, causing numerous consequences, and generating a high mortality rate. (BAENINGER, R; VEDOVATO, LR; NANDY, S, 2005, P.13).

Although a large part of the population has been harmed by the pandemic, however, health professionals are the most affected, as they are exposed to extreme pressure,

both physical and psychological, as they deal directly with the severity of the risk of infection and the possibility of transmitting it. for family members. Due to the high level of contamination, they had to reinforce biosecurity measures inside and outside their workplaces. Associated with the excessive use of PPE's (masks, face shields and glasses. In addition, it was reported by some professionals the appearance of cutaneous movements in the skin after infection by the virus. (MEDEIROS, EA; 2020, p.2).

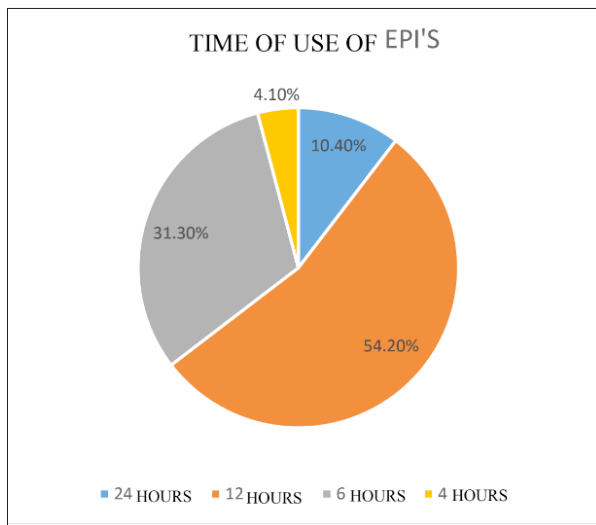
After the onset of COVID-19, some health professionals in São Luís-MA reported the appearance of skin conditions that can vary in different ways. In some cases it is possible to notice the presence of acne, reddish lesions or even itching and flaking. This research was developed with the objective of evaluating the prevalence of skin variations that appeared after infection by the Coronavirus and to observe the possible causes that triggered the appearance of these changes in the skin.

MATERIALS AND METHODS

The research was characterized by a descriptive, quantitative and cross-sectional approach on the prevalence of skin conditions reported after infection by COVID-19 in health professionals in the city of São Luís-MA, the research period took place between September and October 2021. It was used as an inclusion criterion, health professionals over 20 years old who were submitted to answer an adapted questionnaire that contained 20 closed and open questions about the variations in the skin observed after contamination of the virus, and had a sample of 54 health professionals were submitted to answer the proposed questions. To carry out the study, they were divided into 2 groups, group A, Qualitative and quantitative variables were described in absolute and relative frequency presented in graphs. It is worth mentioning the recommendations of

resolution 466\2012 in the National Health Council that regulates research involving human beings. It was highlighted that the data collection was through a questionnaire with confidential answers, which maintains the anonymity of the interviewees.

RESULTS AND DISCUSSION



Graphic 1. PPE use time'

Source: survey data, 2021.

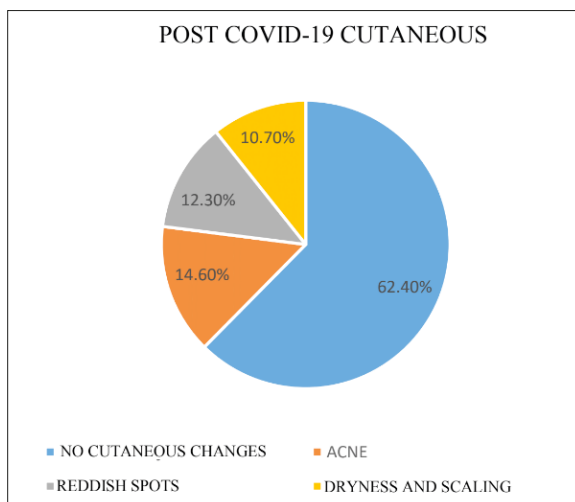
According to Garcia et al., (2021) since the first cases of contamination by the new Coronavirus appeared, world organizations have been encouraging the use of preventive measures on the use of personal protective equipment for health professionals during contact with patients infected with COVID-19”

Given the results obtained through the survey, it was observed that 54.2% of health professionals spent 12 hours using personal protective equipment. 31.3% spent 6 hours, 10.4% spent 24 hours and 4.1% spent 4 hours using the safety instruments. Because the virus is highly contagious, the correct ways to use PPE were essential to avoid infection with the disease. According to Teixeira:

The prevalence of skin lesions related to protective equipment was 97% among

frontline health workers and included skin lesions affecting the bridge of the nose, hands, cheeks and forehead. Furthermore, frequent hand hygiene was associated with a higher incidence of dermatitis in this region. (TEIXEIRA, 2020 p. 3467).

Due to the long period of time that health professionals spent in their workplaces, and linked to the excessive use of PPE, it can be observed that the friction and compression of the masks, glasses and face shield may have been an important factor in the appearance of skin movements, it is worth noting that the frequency of hand washing during shifts and the use of alcohol gel may have triggered these changes in the skin of these professionals.



Graph 2. Post-COVID-19 skin changes

Source:survey data, 2021.

It was observed through the proposed questionnaire that 62.4% of the interviewees did not present any manifestations after infection by COVID-19. However, 37.6% described the appearance of changes in the skin after being affected by the virus, dividing it into pathologies, it can be analyzed that 14.6% of the interviewees noticed the presence of acne on the face after this period.

For Figueiredo et al., (2011) Acne vulgaris is theoretically the most common skin disease, reaching 85 to 100% of people at some stage

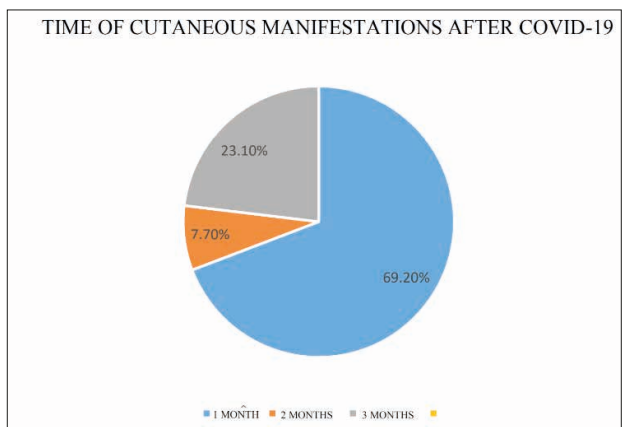
of life. It is characterized by the presence of comedones, papules, pustules and nodules in more severe cases.

Due to the emergence of the Coronavirus, the entire population was instructed to use masks as a means of preventing the disease, including health professionals, who had to deal directly with infected patients.

(HAN, 2020 apud ZORTÉA, 2020 pg. 48)
“The appearance or worsening of acne may be related to some factors resulting from the occlusion performed by the mask, this causes changes due to the effect of higher temperature and increased humidity in the area, which which leads to a probable imbalance of the bacterial flora”

From data obtained through the survey, it was observed that 12.3% of professionals had reddish spots in some regions of the body characteristic of hives. Brandão et al., (2021) state that urticaria is the most frequent manifestation reported by patients infected with COVID-19 and that although the pathogenesis of urticaria was a factor attributed to the drugs used to treat the disease, evidence shows that the appearance of this change in the skin may be the inflammatory response of the immune system to acute infection.

In addition, 10.7% of respondents mentioned the appearance of dryness and flaking in the regions of the arms and hands. According to Ponte et al (2020) hygiene and washing hands correctly is one of the best preventive measures as a way to reduce the transmission of the virus, however, the frequent use of disinfectants and regular washing can trigger eczema of the hands due to skin microbial imbalance.

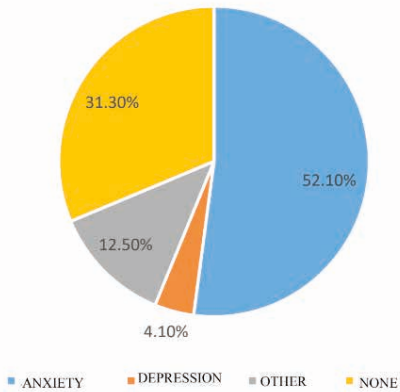


Graph 3. Timing of post-COVID-19 skin manifestations.

Source: survey data,2021.

According to Filgueira et al., (2020) among the skin changes reported by patients who had COVID-19, hives and hypersensitivity to drugs were the most constant. Due to the use of antibiotics and antivirals in the treatment of the disease, it is still difficult to differentiate which of these skin symptoms may have probably caused these skin eruptions, so an early and individual diagnosis of each patient must be made.

According to the results of the research, it is observed that 69.2% presented changes in the skin after one month of the onset of the virus, after two months 7.7% of the interviewees observed the appearance of these lesions, especially 23.1% identified movements rashes on the skin only after three months. Among the drugs used to combat the disease, the ones most cited by the interviewees were Azithromycin and Ivermectin, and some professionals needed to use vitamins such as C and D.



Graph 4. Psychological symptoms after COVID-19

SOURCE: survey data, 2021.

Among all the affected classes, health professionals were the most affected by the pandemic, having to deal with a highly contagious virus with a high mortality rate within crowded hospital environments and with extreme pressure. According to Almeida et al., (2020) even though health professionals are subjected to experiencing numerous stressful situations related to their work environment, it was possible to evidence the increase in cases referring to psychological issues caused by the COVID-19 pandemic.

In view of the results obtained through the survey, it was observed that 52.1% of respondents manifested symptoms of Anxiety while working on the front line to combat the virus. 4.1% showed signs of depression while performing their duties. 12.5% manifested other psychological symptoms and 31.3% did not analyze any occurrences related to emotional phenomena.

“When the emotional is unbalanced, the body gives signs, caused by excess of emotions or the absence of them” (ROAZZI et al., 2011). Exposure of health professionals to stressful situations within their workplaces may have been a predominant factor in the appearance of skin disorders in these individuals.

CONCLUSION

Since the beginning of the COVID-19 pandemic, health professionals in São Luís-MA have played a very important role in combating the virus, having to deal directly with patients and running the risk of contamination. Many of them were affected by the disease and reported skin changes after infection, such as acne, reddish spots, itching and flaking.

The research aimed to observe the possible causes that may trigger the appearance of these changes in the skin, such as excessive use of PPE, constant hand washing, adverse reactions to the drugs used in the treatment of the disease and psychosomatic factors.

Through the survey, the number of professionals who had skin conditions was 37.6% in relation to the number of respondents. Therefore, a significant percentage of people who developed skin changes after being infected with COVID-19 were obtained. However, because some individuals are asymptomatic, they have not reported any skin manifestations. It is worth emphasizing the importance of carrying out other studies in relation to the subject addressed, since it is a relatively new disease and still generates some doubts about its reactions in the body.

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APPENDIX

Quiz

1- Are you a healthcare professional?

Yes

No

2- Occupation area:

.....~

3- Gender:

Feminine

Masculine

The person preferred not to say

4- Age:

between 20 and 25 years old.

between 26 and 35 years old.

between 36 and 45 years old.

between 46 and 55 years old.

5- Current on the front lines of covid-19?

Yes.

No.

6- Have you tested positive for Covid-19?

Yes.

No.

7- Were you hospitalized? How much time?

.....

8- Did you have complications in the treatment against Covid-19? Which ?

.....

9- Did you undergo clinical drug treatment against Covid-19? Which?

.....

10- Did you observe changes in the skin after the onset of the virus? Which body regions?

.....

11- Did you have dark spots?

Yes.

No.

12- Did it show light spots?

Yes.

No.

13- Did you have red spots?

Yes.

No.

14- After how long did you observe changes in the skin after the virus affected?

one month.

two months.

three months.

15- Do you do aesthetic treatment? Which

.....

16- Do you use sunscreen daily?

Yes.

No.

17- Period of onset of spots:

far away

short

permanent

18- Use of PPE's:

24 hours.

12 hours.

6 hours.

4 hours.

19- Did you feel emotional changes acting on the front line in the fight against the virus?

Yes.

No.

20- Did you have any symptoms related to these during the time you worked on the front lines of Covid-19?

anxiety.

depression.

others.

none.