
May 6, 2022

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Dear Dan Lundergan,

The recommendation report on *Burnout in Healthcare Workers* has been completed and is attached below. It contains all the research done and the conclusions made from it, with our recommendation on healthcare workers moving forward. This report was started as a project to help hospitals and healthcare workers, specifically improving mental health by decreasing burnout, this was planned to be completed by May 6, 2022.

Burnout in healthcare workers is a serious issue as it has a huge toll on their mental health in many ways, it affects the efficiency of hospitals, and it creates many issues for patient care. It is an issue that affects everyone somehow and has gone on too long. The purpose of this recommendation report is to offer ways that this burnout can be improved, which will in turn improve hospital efficiency and patient care. This report will go into further detail on what burnout is and other key definitions that have to do with this issue, more background information will be given, the primary research findings will be gone over and analyzed, and recommendations will be made on this issue.

I hope this information is satisfactory and will be helpful for you concerning the hospital and the overall mental health of healthcare workers. Please feel free to reach out with any questions, comments, or concerns you may have, we are happy to give any extra information we can or clear anything up.

Sincerely,

Group 6

Recommendation Report:

Healthcare Worker Burnout During the COVID-19 Pandemic

May 6, 2022

Abstract

This recommendation report gives an overview on the effects of burnout in health care workers due to the COVID-19 pandemic. Burnout is a serious issue our society has been facing and has been made worse due to the pandemic, healthcare workers have been facing serious consequences due to burnout and other issues like anxiety, depression, isolation, and lack of motivation. When healthcare workers experience these issues it takes a big toll on their mental health along with affecting the hospital and the patients they are treating. This report goes into detail on this issue along with giving more detail on the research that has been done and finally giving some recommendations on how the issue can be resolved.

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<https://public.tableau.com/app/profile/james.madamba/viz/MadambaJFinalBurnout/Dashboard?publish=yes>

Executive Summary

This recommendation report contains primary and secondary research done on the issue of burnout in healthcare workers due to the COVID-19 pandemic. The goal of the research conducted was to develop ways as to how this issue of burnout can be improved and eventually resolved completely. Our research indicated a strong connection between the COVID-19 pandemic and burnout in medical workers, and it also connected mental health issues to the pandemic as well within the medical field. Research conducted by Mental Health America showed many nurses in America have been dealing with deteriorating mental health symptoms such as emotional exhaustion, difficulty sleeping, lower self-esteem, upsetting thoughts, images and dreams, racing thoughts, and depression (MHA, 2022). Within the same survey, nurses were asked to provide their top three causes for stress since the pandemic. The top answers in order were uncertainty regarding when things would settle down and return to normal, burnout, and a heavy/increased workload. This shows that medical workers are self-aware that burnout and being overworked since the pandemic are leading causes for their stress and mental health concerns. Research shows staff members overwhelmed by the stress of COVID-19 were seven and nine times more likely to suffer from depression and anxiety. In addition to stress, medical workers with six to nine years of experience were two times more likely to report moderate or severe depression compared to those with 10 or more years of experience in the medical field (Hassamal, 2021). Data has also been compared between healthcare workers and non-healthcare workers in terms of anxiety and depression, and the results indicated that healthcare workers had a higher rate of individuals with insomnia, anxiety and depression than non-healthcare workers (Sampaio, 2021). This survey was taken shortly after the COVID-19 pandemic began, and shows the drastic difference in the beginning stages of the pandemic between the two demographics. These research surveys indicate a close connection to burnout in the medical field and the COVID-19 pandemic while also highlighting how harshly mental health has affected medical workers throughout the entirety of the pandemic. More results from an Oldenburg Burnout Inventory (OLBI) tests for healthcare workers (HCW) during the pandemic received over 3,000 responses. OLBI covers disengagement and exhaustion with a score out 5. (1 = “Strongly disagree”; to 5 = “Strongly agree”) The mean scores for disagreement and exhaustion were “2.38 and 2.5” (Benjamin, 2020) With the average score being almost half, burnout has severely impacted HCW’s during the pandemic. Many described the training as “poor” and are looking for improvement to reduce burnout. Finally, our recommendation for this issue is to implement more paid vacation and flexibility when it comes to scheduling, having employer-sponsored therapy offered to every worker, and including additional training for managers and other supervisor positions.

1.0 Introduction

1.1 Summary:

In our report, you will find our problem statement, background, benefits, research methods, results, and conclusion. The purpose is to provide a solution to the problem of burnout in healthcare workers because of Covid-19. Burnout is described as feeling physical or mental stress that leads to depression, PTSD, and emotional exhaustion. The benefits of implementing a proper solution can reduce fatigue, depression, anxiety, and improve the overall work-life for employers. The main terms we talk about are burnout, fatigue, depression, and covid-19 which you can find the definitions in section 1.6. Our main research methods include a survey where we posited a link for the members of Kaiser Permanente Washington Medical Group to fill out. We have a few results and are looking to get more shortly. Our survey questions are yes/no and on a scale of 1-10 to have measurable data to create visualizations. While they have not been created yet, we plan to use Tableau to visualize our findings. In our conclusion, we provide a summary of what our research has led us to and the effects covid-19 had on the healthcare industry. With all these aspects in mind we came up with a combination of solutions that involve employer-sponsored therapy, more flexibility with work schedule, and additional training from managers to help reduce burnout.

1.2 Purpose:

This document is to report the work that has been completed by team 6 and give our final recommendation on the issue of burnout in healthcare workers.

1.3 Problem Statement:

Burnout in healthcare workers has become increasingly worse due to the COVID-19 pandemic and this issue has directly affected not only the healthcare workers, but also their patients and the hospital. Solutions need to be made in order for the healthcare system to not decline any further and for our healthcare workers to regain their mental health and drive for their work.

1.4 Background:

The term burnout can be described as a feeling of mental and physical stress that can lead to emotional exhaustion, loss of motivation, and depersonalization (Leo et al., 0001). This is most often caused by one's workplace not having a good balance of an employee's personal life and wellbeing, and the regulations of the workplace (Leo et al., 0001). Prior to the COVID-19 pandemic, physicians were surveyed on their feeling of burnout and it was concluded that around 40% had feelings of depression and suicidal thoughts, these numbers have only become progressively worse due to the pandemic with many reporting new symptoms and many deciding to quit their jobs (Levine, 2021). Because of the increased burnout, the amount of healthcare

workers who have quit is around 20%, and those who are left have only become more stressed which makes a hospital's ability to correctly care for their patients more difficult (Levine, 2021). Patients have reported losing confidence in the healthcare workers which only makes the healthcare workers feelings of burnout, depression, and anxiety worsen, it has become an unfortunate cycle of burnout and decreased level of patient care (Levine, 2021). It should be made clear that this feeling of burnout was prevalent before the pandemic and it shows up in everyone, not just healthcare workers, it has been an ongoing issue for too long. The pandemic has heavily increased levels of burnout which have had detrimental effects on our hospitals, our healthcare workers, and the general population as healthcare workers are vital especially during a pandemic.

1.5 Benefits:

If the results that have been found from our work and research on this project are taken into consideration, there can be very beneficial effects on healthcare workers, hospitals, and patients. Most healthcare workers go into this field because they want to help people and they have a strong motivation for it, without that the healthcare system will rapidly decline which is what is happening currently. Changing certain methods can in the end increase employee morale, motivation for work can again be heightened, fatigue, depression, and anxiety can be reduced, patient care could be considerably better, and the overall well being of healthcare workers can be improved.

1.6 Objectives:

- Detail the strong connection between burnout and mental health issues in the medical field
- Conduct a survey that will be administered to medical workers to showcase personally how much burnout has affected medical workers.
- Illustrate with graphics/images the overwhelming majority of medical workers have experienced since the beginning of the COVID-19 pandemic

1.7 Literature Review and Key Terms:

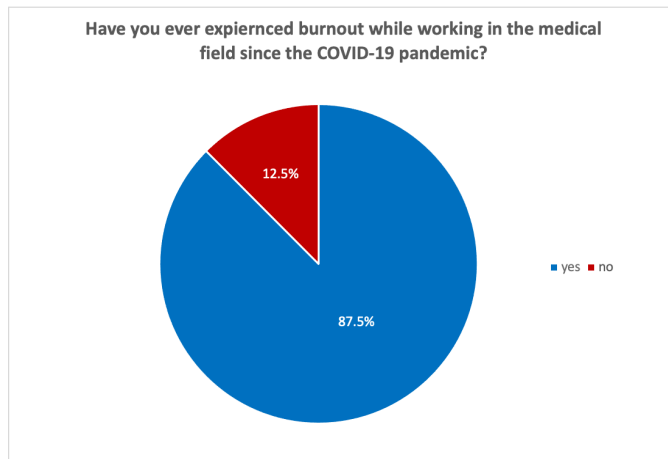
- **Burnout-** “Burnout is a state of emotional, physical, and mental exhaustion caused by excessive and prolonged stress. It occurs when you feel overwhelmed, emotionally drained, and unable to meet constant demands” (Smith et al., 2022).
- **Fatigue:** Extreme exhaustion that lasts a long time and reduces energy, motivation, concentration, and emotional and psychological well being (Mayo Clinic Staff, 2020).
- **Depression:** Common but serious mood disorder. It causes severe symptoms that affect how you feel, think, and handle daily activities, such as sleeping, eating, or working (NIMH, 2022)

- **Anxiety Disorders:** “People with anxiety disorders frequently have intense, excessive and persistent worry and fear about everyday situations. Often, anxiety disorders involve repeated episodes of sudden feelings of intense anxiety and fear or terror that reach a peak within minutes (panic attacks)” (Mayo Clinic, 2022).
- **Covid-19:** Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus (WHO, 2022).

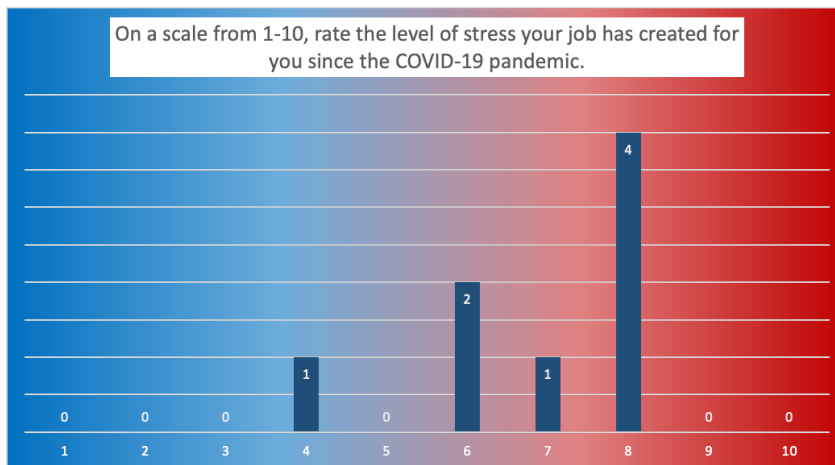
2.0 Research Methods:

We decided to continue with the survey questions as we felt they were easy to measure and get results. We have a total of 7 questions and in order, they are: Have you ever experienced burnout while working in the medical field since the COVID-19 pandemic? on a scale from 1-10, rate the level of stress your job has created for you since the COVID-19 pandemic, on a scale from 1-10, rate the level of emotional exhaustion you have experienced since the COVID-19 pandemic, have you had difficulty sleeping since the COVID-19 pandemic, have you experienced any upsetting thoughts, images or dreams since the COVID-19 pandemic, have you had any suicidal thoughts since the COVID-19 pandemic, and on a scale from 1-10, how much has covid affected the following: How much you enjoy work, Physical health, Mental health, Homelife, Relationships? We narrowed it down to these 7 questions as we had little to no information about them today. A lot of secondary research we conducted was pre-covid and leading up to covid. These questions give us up-to-date answers. The questions are yes/no answers and on a scale from 1-10. This was an essential decision for us as we are now able to visualize this data and make more sense of it. We hope to learn and see if the trend line of burnout in the healthcare industry is still occurring to this day. This will allow us to have more support for our thesis and recommendation report. As for tasks 2 and 3 we have found participants to take our survey. We created our survey using google forms and posted the link to a messaging platform for members of Kaiser Permanente Washington Medical Group. We were able to get eight participants to complete our survey. We organized both yes-no questions and likert scale questions into bar graphs and pie charts for better visualization. We then interpreted the results by running a data analysis.

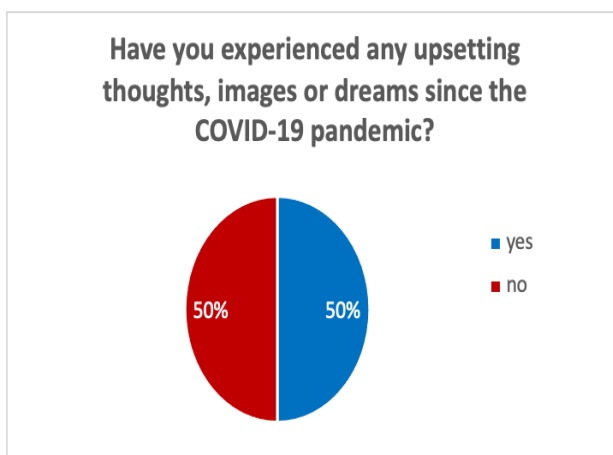
3.0 Results:



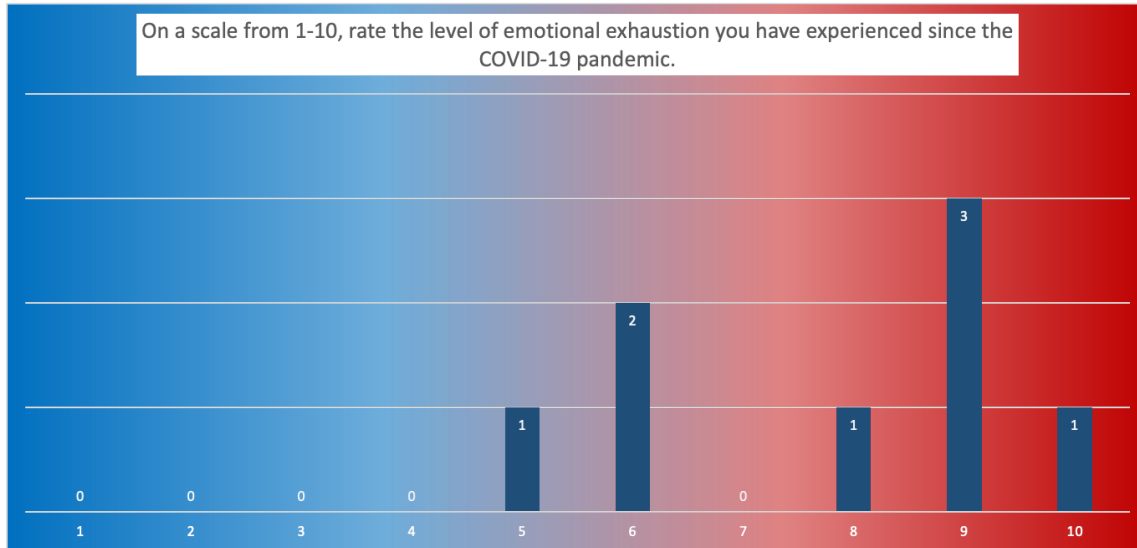
For our first question we asked participants if they have ever experienced burnout while working in the medical field since the COVID- 19 pandemic. 87.5 percent reported yes while 12.5 percent reported no.



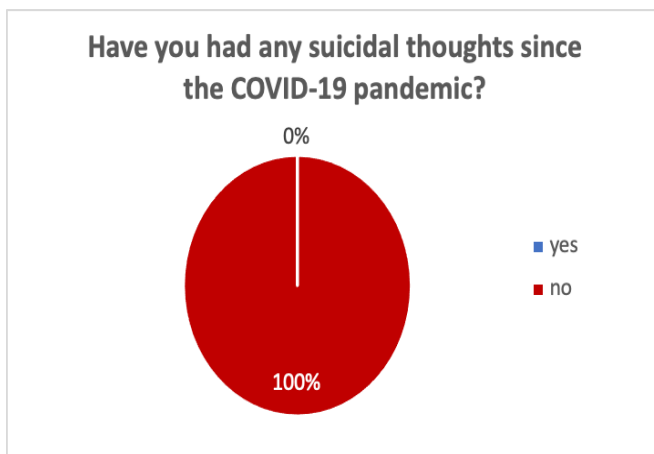
For question two, we asked the participants to rate the level of stress their job has created in their life since the pandemic. Participants were asked to rate their level stress on a 1-10 scale with 1 being “not affected” and 10 being “highly affected.” 62.5% (category 7 & 8 on graph) of participants reported experiencing high levels of stress from their job. 33.3% (category 6 on graph) of participants reported experiencing an average amount of stress from their job. And 37.5% (category 4 on graph) of participants reported experiencing average amounts of stress from their job.



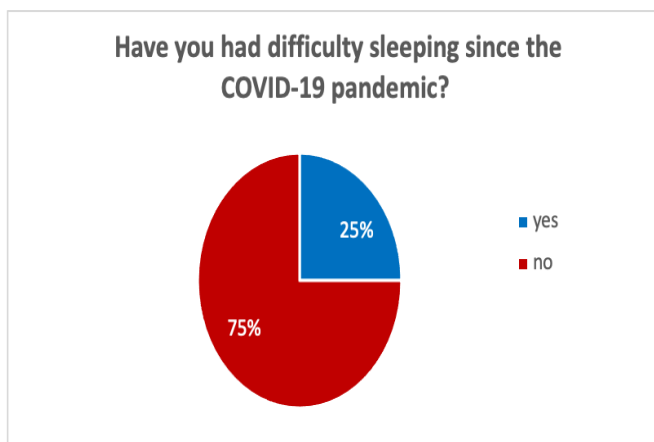
For question 3, we asked participants if they have experienced any upsetting thoughts, images or dreams since the pandemic. 50% of participants reported yes and 50% of participants reported no.



For question four, we asked participants to rate the level of emotional exhaustion they have experienced since the pandemic. Participants were asked to rate their level stress on a 1-10 scale with 1 being “not affected” and 10 being “highly affected.” 62.5% (category 8, 9, 10 on graph) of participants reported experiencing higher amounts of exhaustion. 37.5% (category 5, 6 on graph) of participants reported experiencing an average amount of emotional exhaustion.



For question five, we asked participants if they have ever experienced any suicidal thoughts since the COVID-19 pandemic. All participants reported that they had not experienced any suicidal thoughts.



For question six, we asked participants if they have ever experienced difficulty sleeping since the COVID-19 pandemic. 75% of participants reported no and 25% reported yes.

One a scale of 1-10, how much has COVID-19 affected the following:	Your mental health	Your physical health	Your relationships	Your home life	How much you enjoy working
1	0	0	1	1	0
2	1	0	0	0	1
3	0	0	2	1	1
4	2	1	0	1	1
5	0	2	1	2	2
6	1	1	0	0	0
7	0	0	2	0	3
8	1	1	0	1	0
9	2	1	0	1	0
10	1	2	2	1	0

Displayed in the chart above, for questions 7-11, we asked participants to rate the effect COVID-19 had on the following: personal physical health, personal mental health, home life, personal relationships, and work enjoyment. Results varied based on questions asked.

When asked the affect the pandemic had on their **mental health**:

- 37.5% - reported minimal effect on their mental health
- 12.5% - reported average effect on their mental health
- 50% - reported high effect on their mental health

When asked the affect the pandemic had on their **physical health**:

- 0% - reported minimal effect on their physical health
- 50% - reported average effect on their physical health
- 50% - reported high effect on their physical health

When asked the affect the pandemic had on their **relationships**:

- 37.5% - reported minimal effect on their relationships
- 12.5% - reported average effect on their relationships
- 50% - reported high effect on their relationships

When asked the affect the pandemic had on their **home life**:

- 25% - reported minimal effect on their home life
- 37.5% - reported average effect on their home life
- 37.5% - reported high effect on their home life

When asked the affect the pandemic had on their **work enjoyment**:

- 25% - reported minimal effect on their work enjoyment
- 37.5% - reported average effect on their work enjoyment
- 37.5% - reported high effect on their work enjoyment

The next questions

Mental Health Effects

A survey conducted by Mental Health America (MHA) and distributed to thousands of nurses within the United States. MHA ended up receiving 1,119 responses from medical workers.

Below are the results:

- 82.13% reported emotional exhaustion
- 70.15% reported that they had difficulty sleeping
- 44.59% reported that they have lower self-esteem
- 42.45% reported upsetting thoughts, images and/or dreams
- 40.39% reported racing thoughts
- 38.43% reported that they were (MHA, 2022)

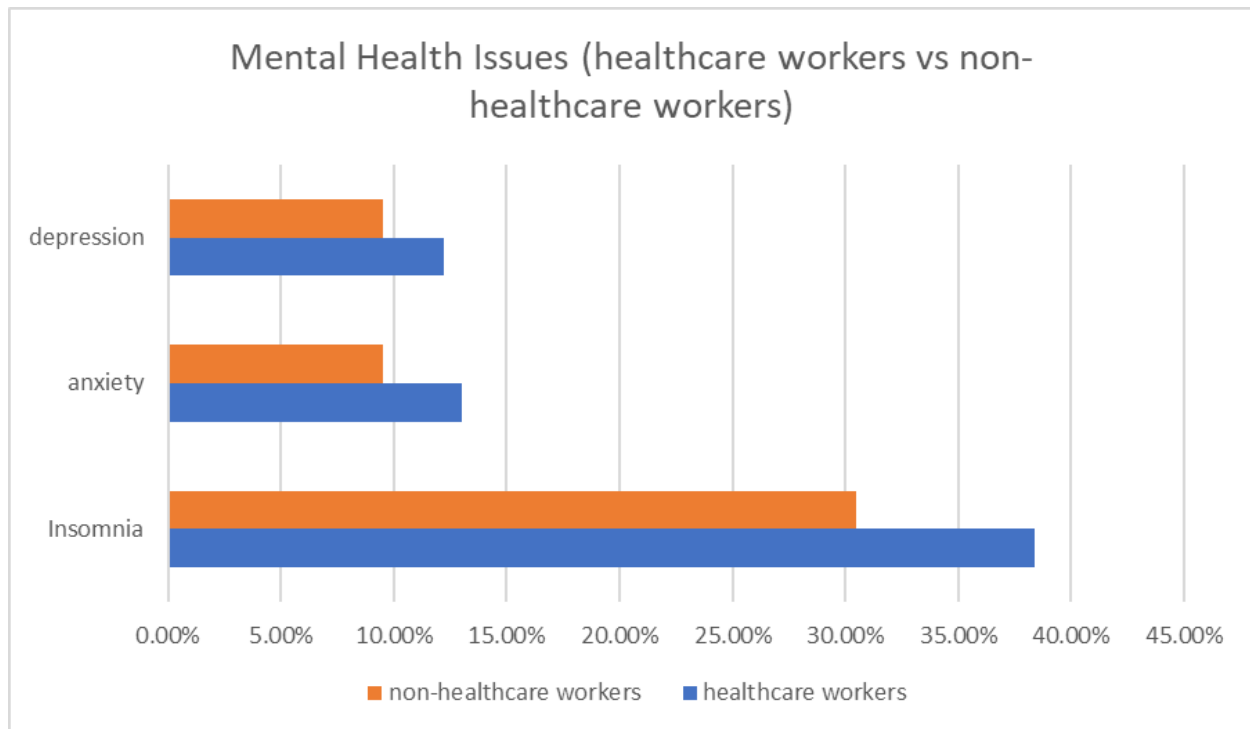
This data indicates that there is a glaring comparison in a large portion of medical workers that are struggling mentally and physically directly because their work overload during the COVID-19 pandemic. When asked what their top three work-related stressors are over the last there months, these were their top 3 responses:

- 60.59% reported that they were stressed regarding the uncertainty about when things would settle down/return to normal
- 53.53% reported burnout was a main cause for stress
- 48.61% reported that a heavy/increased workload is the cause for their stress

Another research designed similarly to the previous case study discussed. A survey was provided to a hospital that contained 3,500 medical workers. Out of the 3,500 medical workers, they received 1,246 responses. In the final analysis, 21% reported feelings of depression and 33% reported feelings of anxiety, while 46% of medical workers reported overwhelming stress. In

fact, staff members overwhelmed by the stress of COVID-19 were seven and nine times more likely to suffer from depression and anxiety. In addition to stress, medical workers with six to nine years of experience were two times more likely to report moderate or severe depression compared to those with 10 or more years of experience in the medical field. This shows a clear correlation between a large portion of the medical workers in this hospital who are dealing with the struggles of anxiety and depression (Hassamal, Sameer; Dong, Fanglong; et al, 2021).

Research suggests that there is a jump in mental health issues amongst healthcare workers and non-healthcare workers. The following graph presents the data:



(Sampaio, 2021).

4.0 Conclusions:

Based on the team's research, results, and visualizations, it is clear that burnout is still a major issue within the medical field and has significantly been affecting medical workers severely since the beginning of the COVID-19 pandemic.

Our research has shown:

- A strong connection between burnout in the medical field and mental health issues such as depression, anxiety, insomnia, and racing thoughts.
- Healthcare workers have reportedly experienced a higher percentage of mental health issues compared to non-healthcare workers.
- Nearly 1 in 5 healthcare workers in the United States have quit their jobs due to the COVID-19 pandemic.
- Roughly 66% of nurses in the medical field have considered quitting their jobs due to the stress of the pandemic.
- Medical workers have been severely overworked and over exhausted mentally, physically, and emotionally since the COVID-19 pandemic.

5.0 Recommendation:

When it comes to finding ways to avoid burnout, our team came up with a few ideas that could possibly aid in this crisis.

- 1) Allowing more paid vacation days and more flexibility when it comes to scheduling. We believe allowing more time off would not only combat work-related fatigue but also help workers establish a healthy work-life balance.
- 2) Having employer-sponsored therapy offered to every worker. We understand that some hospitals and similar organizations already have departments within them that are centered around employee mental-health, but we believe not only adding these types of resources to every hospital and medical center should be required, but due to the high numbers of burn out, additional support and funding should go into these departments.
- 3) Having additional training for managers and other supervisor positions, geared towards burnout prevention and how to support fellow employees undergoing this stress.

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