COVID-19 Effects on Healthcare Workers Mental Health

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The COVID-19 pandemic brought a lot of new things to the United States and to the world. Every day we were hearing new buzzwords – self-quarantine, isolation, incubation period (Bon Secours, 2020), and even burnout started becoming a buzzword. Burnout is not new, however, the word burnout first originated in the 1970's by Herbert Freudenber, unfortunately it was not until 2019 when burnout became a clinical term as defined by the World Health Organization (WHO); (Georgetown Psychology n.d).

In 2019 the WHO still had not classified burnout as a medical condition, it was still considered an occupational phenomenon, the WHO has the following definition for burnout:

> "Burn-out is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions:
>
> - Feelings of energy depletion or exhaustion
> - Increased mental distance from ones job, or feelings of negativism or cynicism related to ones job; and
> - Reduced professional efficacy."
>
> (World Health Organization, 2019, para 3)

Exploring the causes of burnout, the whys behind the condition, and the impact of burnout is important as in 2021 there were approximately 333,942 healthcare providers that left the healthcare industry, citing causes for leaving as burnout or long hours, heavy patient loads, and some were personal health concerns (Ellis, 2022). Included in this exodus were approximately 117,000 physicians from internal medicine (15,000), family practice physicians

(13, 015), and clinical psychology (10,874). In addition to physicians were nurse practitioners (53,295) and physician assistants (22, 704); (Ellis, 2022).

We must look for solutions to help reduce the stress that providers feel that lead to the feelings of emotional exhaustion, depression, anxiety, and moral injury that are causing providers to flee from the healthcare field. Administrative burden is also a cause of burnout for providers, with the recent changes by the Centers for Medicare and Medicaid Services for the requirements in documentation for Evaluation and Management visits; no longer would the history of present illness, past, family or social history, review of system or physical exam be included in the coding determination, instead the codes are determined by the medical decision-making process the physician used. These are three categories: number and complexity of presenting problems, tests, and overall medical decision making. Changing away from the labor-intensive documentation requirements would help reduce the administrative burden on providers. (*Calendar Year (CY) 2023 Medicare Physician Fee Schedule Proposed Rule | CMS*, 2022, para 13-14).

Literature Review

Burnout is not affecting just a small portion of the healthcare community, according to Yates (2020) emergency room physicians, anesthesiologists, radiologists, general internists, family physicians, oncologists, psychiatrists, general and trauma surgeons, physiatrists, cardiologists, dermatologists, obstetrician-gynecologists, gastroenterologists, residents, and medical students all have reports feelings of burnout. In a 2018 survey cited by Yates (2020) 15,000 physicians responded with varying degrees of burnout and 14% of those physicians reported suicidal feelings. In 2019 the survey was repeated and of the 14% of the providers that mentioned suicidal thoughts only one-third sought treatment. Yates (2020) also found through the meta-analysis of 47 studies that physician burnout increased the risk of an adverse effect by almost double and contributed to decreased quality of care and lower patient satisfaction. There are things physicians can do to help reduce their stress and reduce the effects of burnout to be more engaged with their patients. Hofert et al. (2019) discussed mindfulness-based stress reduction (MBSR) techniques such as yoga, body awareness training, and exploring habits of thinking, feeling, and acting. The issue of burnout has become so pervasive that specific psychological test: the Maslach Burnout Inventory (Williams, 2020,) has been used to discuss the degree of burnout in providers.

According to Williams (2020) there are two factors at play, burnout and moral injury, and differentiating between the two can prove to be difficult as there is a degree of overlap in the symptoms. Williams (2020) has defined moral injury as “perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply health moral beliefs and expectations” (p 2). Present day application of moral injury or distress these can be attributed to a facility or organization’s ethical climate i.e., their values, the environment of the practice or organization,

and quality of care (Williams, 2020). Kerlin et al. (2020) focused on critical care providers and discussed how burnout presents when there is a mismatch between the individual and the job; the six areas they looked at were workload, control, reward, community, fairness, and values. In a survey of U.S. based university hospital-based intensive care unit (ICU) nurses, 81% of the critical care nurses experienced at least one symptom of burnout and in a French survey 33% of ICU nurses exhibited severe burnout symptoms.

Kerlin et al. (2020) provided a long list of risk factors among ICU providers, broken down into four categories these are individual characteristics, workload and organizational issues, quality of working relationships, and clinical care requirements. Some highlights of the discussion were that women at the highest level of burn out (60% according to the Physician Work Life Study), younger providers are also at a higher risk of burnout due to inexperience or self-confidence. The volume of work, measured by the number of hours, has also contributed to burnout syndrome along with the lack of control over ones schedule along with high patient turnover. Another factor added to the list is having more overnight shifts, several consecutive workdays and less off time; in addition, feeling too much responsibility of concurrent and conflicting work demands. Yates (2020) suggested that meditation and mindfulness training may be beneficial to combat the signs of burnout, along with system changes within an organization would be beneficial.

Hofert et al. (2019) focused on how to mitigate the effects of burnout for providers. On a voluntary basis the authors offered an 8-week MBSR program at a community hospital. Using pre and post surveys they asked open-ended questions to review the levels of burnout present in the participating providers. MBSR targets mindfulness practices to remove both emotional stress and physical stress. Having been studied for over 30 years, it has been proven that “critical self-

reflection (mindfulness)" (para. 6) allows providers to be more attentive when listening to patients, see mistakes they may have made, review any technical skills needed, allow them to make decisions based on evidence, and renew their own values so that they are able to act with more clarity and compassion for their patients. The sessions the 8-weeks "included mindfulness mediation practices, yoga and body awareness training, and exploration of habits of thinking, feeling, and action" (Hofert et al., 209 para. 9).

Kerlin et al. (2020) brings up the following strategies to help reduce burnout, both organization and individual accountability for recognizing provider burnout as well as establishing a culture that focuses on healthy collaborative professional environments, providing flexibility, developing resources to support providers that are acknowledging symptoms of burnout. Another suggestion by Kerlin et al. (2020) would be to focus on team-building, and increased communication in the organizational professional development activities. Using team debriefing exercise after a high-stress event such as a cardiac arrest or the loss of a patient can help providers articulate what went well, what could have been done differently and lets everyone on the care team know that they were valuable to the event overall.

It appears that the most popular solution is MBSR or mindfulness-based mitigation as noted by Hofert et al. (2019), Yates (2020), and also Kerlin et al. (2020). Allowing providers to practice self-care and learning to be aware of their stress levels allows them to reduce stress overall making them more attentive providers. With responses on the post survey conducted by Hofert et al. (2019) such as "learned to travel side by side with patient predicaments instead of taking it on my shoulder" and "stay with patient instead of being way ahead in my own head during the encounter" (para. 23); it would be beneficial to further study mindfulness-based mitigation practices.

Identified Solution

MBSR may be done as a voluntary guided course such as the one used by Hofert et al (2019) or with a self-care routine using the P.A.C.E Yourself Practice (Mindful, n.d.). The P.A.C.E Yourself Practice is giving yourself permission to prioritize your health and well-being; something providers advocate for but are not good at themselves. Consciously giving yourself permission eventually makes it into an action. Bringing awareness to the current moment or experience while anchoring yourself in your breathing to allow stress and tension to resolve Being compassionate to yourself once you have become aware of your physical and mental state, offer yourself words of encouragement and kindness. And finally envision your next moments with a sense of well-being, envision having the energy and vitality to step into your next moment (Mindful, n.d., para 11–14).

Mayo Clinic Staff (2022) recommended several options for MBSR practices such as paying attention and slowing down, living in the moment and being intentional, accepting yourself, and focusing on breathing, in addition there can be structured exercise such as body scan meditation, sitting meditation, and talking meditation (Mayo Clinic Staff, 2022). Creswell (2017) discussed an 8-week MBSR program that Jon Kabat-Zinn designed at the University of Massachusetts Medical School. During this 8-week program the different activities include Mindful intervention retreats and brief interventions, internet and smartphone application mindfulness interventions, mindfulness-related interventions, and control interventions all designed to improve physical and mental health, interpersonal outcomes and help with cognitive and affective factors; in addition to helping with chronic pain management, reduce depression and improve substance abuse outcomes.

Failure Mode and Effect Analysis (FEMA) – please also see appendix

Process Step #1	**1**	**Process Step**	Introduction to identifying the signs of burnout		
	2	**Potential Failure Mode**	Providers not willing to look at themselves and admit there is a problem	Incomplete education material provider on burnout	Facility not willing to recognize the problem
	3	**Potential Cause(s)**	Busy lives and do not take time to look inward and recognize their own symptoms	Too little research done on the topic and not enough information provided for clear introspection	Facility in denial regarding the severity of burnout on providers and the prevalence of it in the facility
	4	**Severity**	Moderate	Moderate	Moderate
	5	**Probability**	Frequent	Occasional	Occasional
	6	**Hazard Score**	8	6	6
	7	**Action (Eliminate, Control, or Accept)**	Control	Eliminate	Eliminate

	8	**Description of Action**	Work with providers to help minimize or manage their work and possibly personal schedules to allow them to review their symptoms	Ensure that complete research on topic is done and complete information is provided to providers and facility	Ensure that facility directors understand the severity of the condition as well as the signs and give evidence of signs in providers working in facility

Process Step #2	**1**	**Process Step**	Finding an MBSR Program		
	2	**Potential Failure Mode**	Finding appropriate program for facility culture (potential religious doctrine conflicts)	Costs of programs available	Structure of the program
	3	**Potential Cause(s)**	One religious doctrine may not support another	Costs may be prohibitive depending on who is fronting the costs for program material (facility vs. providers)	The structure of the program – virtual vs. in person, solo vs. group may not work with the facility and the participants
	4	**Severity**	Minor	Minor	Moderate
	5	**Probability**	Occasional	Occasional	Occasional
	6	**Hazard Score**	3	3	6

	7	**Action (Eliminate, Control, or Accept)**	Control	Control	Control
	8	**Description of Action**	Ensure that any religious aspect of the program does not interfere with the religious doctrine of the facility; i.e. Buddhist program vs. Catholic facility	Determine up front who will be responsible for the costs of the program materials	Review the structure of proposed program to ensure that the structure of the modules will work with the confines of the facility

Process Step #3	**1**	**Process Step**	Introduction of an MBSR program to providers		
	2	**Potential Failure Mode**	Providers fail to understand what an MBSR program is	Providers fail to recognize that the need an MBSR program	Provider not feeling as though they can commit the time needed
	3	**Potential Cause(s)**	Incomplete information provided on MBSR programs	Incomplete information provided on correlation between burnout and MBSR programs	Providers have busy work schedules and busy personal lives
	4	**Severity**	Moderate	Moderate	Moderate
	5	**Probability**	Frequent	Frequent	Frequent
	6	**Hazard Score**	8	8	8

	7	**Action (Eliminate, Control, or Accept)**	Eliminate	Eliminate	Control
	8	**Description of Action**	Ensure complete information on program is available with a detailed explanation of MBSR programs	Ensure information provided draws a clear link between the signs of burnout and the benefits of MBSR programs	Work with providers to control work and personal schedules to allow them time to participate

Process Step #4	**1**	**Process Step**	Location and schedule for group discussions		
	2	**Potential Failure Mode**	Providers with different schedules	Is group discussion going to be inside or outside the facility	Providers may not want to come back into facility on day off
	3	**Potential Cause(s)**	24-hour staffing needs of the facility	Constraints at facility for space	Providers spent large portions of their week in the facility
	4	**Severity**	Moderate	Minor	Minor
	5	**Probability**	Frequent	Occasional	Occasional
	6	**Hazard Score**	8	3	3
	7	**Action (Eliminate, Control, or Accept)**	Accept	Control	Control

	8	**Description of Action**	Due to staffing needs of the facility, this is unavoidable, scheduling multiple groups sessions at different times can accommodate different schedules	Secure location that works for both facility and providers	Ask participants if they want to have group discussions in the facility or at an outside location

Process Step #5	**1**	**Process Step**	Retaining engagement in an MBSR program		
	2	**Potential Failure Mode**	Time commitment needed for individual and group activities	Structure of program	Failure to complete entire program, i.e. feeling better no longer need to continue
	3	**Potential Cause(s)**	Providers with busy schedules may not be able to objectively review their schedule to find the time for MBSR programs	A provider does not match with the structure – prefers virtual over in person discussions, prefers group activities over individual activities	Provider begins to feel better and decides that they no longer need to participate in the program
	4	**Severity**	Moderate	Minor	Moderate
	5	**Probability**	Frequent	Occasional	Frequent
	6	**Hazard Score**	8	3	8

	7	**Action (Eliminate, Control, or Accept)**	Control	Control	Control
	8	**Description of Action**	Review with providers the time needed for the program and their schedules to help them find time to participate	Work with the provider to find solutions to the perceived conflicts to allow them to participate	Provide information at the onset of the program and throughout, of the long-term benefits of continual participation and the drawbacks of withdrawing early

Process Step #6	**1**	**Process Step**	Address Provider Concerns		
	2	**Potential Failure Mode**	Worry about stigma attached to being in the program	Does not feel that they are getting what they need from the program	Personality conflicts between attendees and/or instructors
	3	**Potential Cause(s)**	Cultural/societal background	Not completing steps in program appropriately	Shaming within group discussions for individual opinions
	4	**Severity**	Moderate	Moderate	Moderate
	5	**Probability**	Occasional	Frequent	Frequent
	6	**Hazard Score**	6	8	8
	7	**Action (Eliminate, Control, or Accept)**	Control	Control	Control

	8	**Description of Action**	Discuss with provider the benefits of the program and provide information regarding the detriments of burnout	Discussing providers response to activities and adherence to program	Discuss issue with those involved, provide counseling to the person doing the shaming and offer alternative schedule to the person being shamed

Quality Measurement Plan

At the beginning of the program each participant will be asked to identify one area that they wish to focus on improving, this could their overall mental health, relationships - either internal or external to the facility, engagement in activities – work or social, or an area that is more personal to the participant.

Each week after the group discussion, the discussion moderators will ask participants to fill out a short survey that asks them:

- What MBSR based activities do you feel helped you the most this week?
- What affect did this activity have on how you felt, and interacted with others?
- What, if any, situations arose that you were better able to handle based on the MBSR activities that you have completed?
- What positive experiences did you have this week?
- Were there any negative experiences for you this week?

The moderators will then enter the information from the surveys into a spreadsheet that is dated to track each participants improvement, as well as review the data for overlaps in successful activities. We will also be able to track when participants start to notice a difference to determine how effective different activities are based on the original area of focus for the participant. At the end of the program all the data will be charted out to determine the measurable information. MBSR activities and when they were documented as starting to help, timeframes for better interactions with others, type of situations that were improved due to MBSR activities and training, and the reduction in negative experiences. Activities that had the highest levels of effectiveness will be utilized in a round 2 MBSR program to further for those that wish to continue, as well as reinforced for new MBSR program participants.

Conclusion

Although provider burnout is a known issue and has had a lot of discussion and research surrounding the causes and how to mitigate the causes of burnout, there has not been a lot of advancement in how to treat and resolve actual burnout. MBSR practices have been the best measure found to help combat the effects of burnout, however, even that practice can be hampered by everything going on. Facilities and providers that do not see burnout as a serious problem, providers feeling that they are unable to slow down to take care of themselves, scheduling issues, and even providers trying the program and opting out early when they begin to feel a little better.

Bringing information to facilities and providers regarding burnout, the cases and effects, is the most important factor in initiating an MBSR program. Everyone needs to be made aware of the potentially catastrophic problems that could arise and harm to patients of burnout if left unchecked. A wrong medication or other treatment decision could be made, patients could be made to feel as though they do not matter to the person who is supposed to be helping them, personal lives can begin to spiral out of control and bad decision made personally. Participation in an MBSR program can give providers tools to help mitigate the feelings of depression, anxiety, and depersonalization that are often exhibited in burnout, and allow them an opportunity to reset their mindset and move into a better space.

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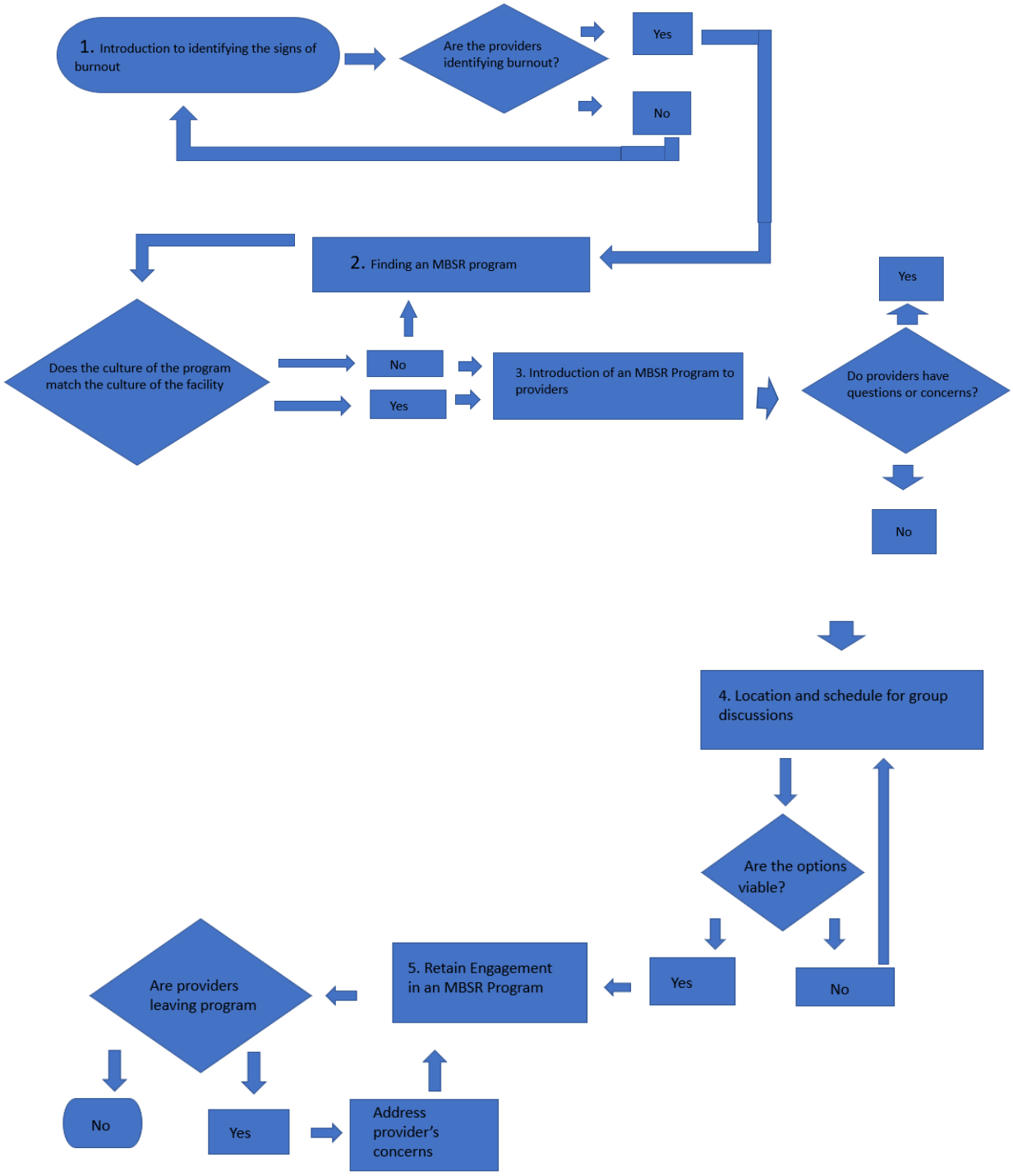
Appendix


1. Introduction to identifying the signs of burnout
Are the providers identifying burnout?
Yes
No
2. Finding an MBSR program
Does the culture of the program match the culture of the facility
No
Yes
3. Introduction of an MBSR Program to providers
Do providers have questions or concerns?
Yes
No
4. Location and schedule for group discussions
Are the options viable?
Yes
No
5. Retain Engagement in an MBSR Program
Are providers leaving program
No
Yes
Address provider's concerns