

# THE PSYCHOLOGICAL IMPACT OF COVID-19 PANDEMIC ON OPERATING ROOM NURSES

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## Problem / Purpose

The purpose of this study is to determine if OR nurses experienced psychological problems during the Covid-19 pandemic, find out these psychological issues and the lingering effects, examine if demographics relate to these issues, and lastly, gain the nurses' insights on what the healthcare system and the government can do to protect OR nurses' mental in the future.

## Literature Review

A survey presented at the World Health Organization's (W.H.O) Big Event for Mental Health highlighted the longstanding underfunding of mental health services. According to the survey, countries were struggling to meet their population's need for mental health services which was further compounded by the Covid-19 viral pandemic.

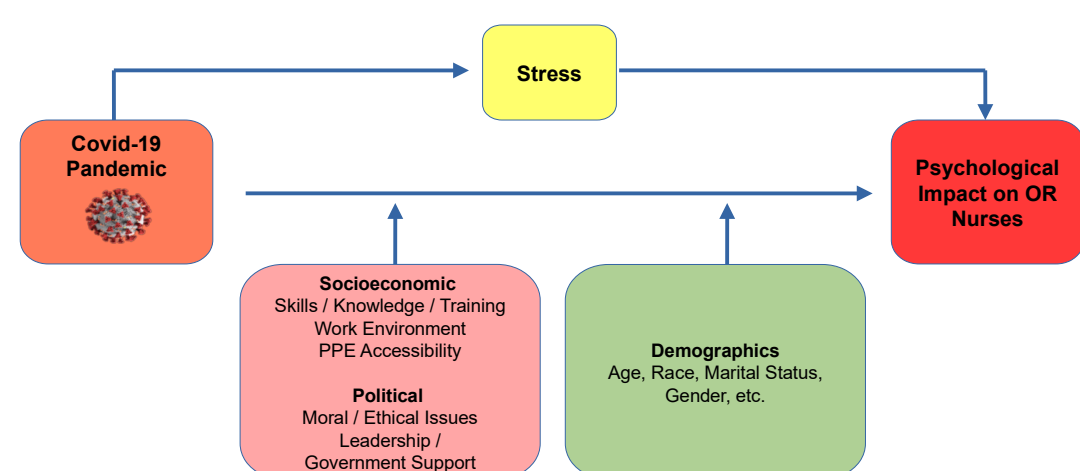
OR nurses are among the most vulnerable front line health care workers at risk of mental health problems during the Covid-19 outbreak due to increased work stress, high risk of infection, and fear of spreading the contagion to their families. It is possible that they themselves can become emotionally drained and psychologically fatigued by this experience.

Currently however, there is a paucity of published articles on how to best prevent psychological distress among OR nurses, and what steps are needed to mitigate harm to their well-being.

## Research Question / Hypothesis

The Covid-19 pandemic have psychological impact on OR nurses, and that healthcare systems and the government can prevent future recurrence of such events by protecting the mental health of these nurses.

## Conceptual Framework



The study's Conceptual Framework is based on Lazarus & Folkman's (1984) Stress Appraisal model which states that, "the way that we evaluate external events (i.e., stressors) determines our degree of stress". The Figure shows the relationship between the five variables, Covid-19 as Independent and Psychological Impact as Dependent, Stress as Mediator and Socioeconomic Political factors and Demography as Moderators. Covid-19 caused Psychological problems on OR nurses during the pandemic brought about by Stress from fear of the unknown. However, the psychological responses of the nurses to the pandemic might also be influenced by demographics like age, gender, etc., and by socioeconomic political factors like accessibility to PPE's, training, leadership support, etc.

## Methodology

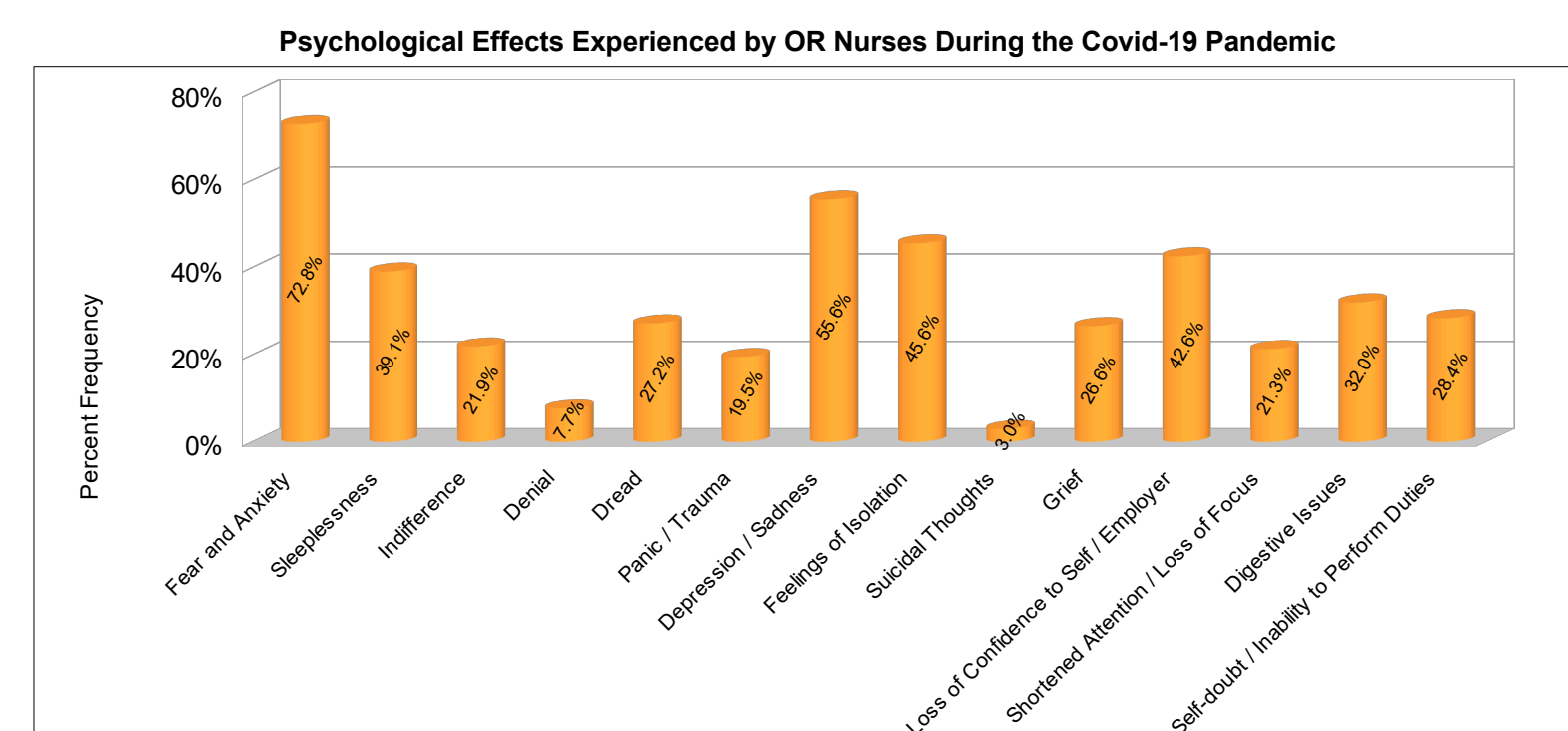
The study utilized Observational Cross-sectional Design. The target population are AORN members who rendered direct patient care to COVID-19 patients in clinical areas outside the operating room. A questionnaire consisting of 14 questions regarding respondents' demographics (country/state/province, age, race/ethnicity, marital status, gender), major/minor psychological stressors they've experienced, how they manage or cope with these conditions and the after effects of these issues, and the nurses' opinions/suggestions as to what the health care system and the government can do to protect OR nurses from experiencing these traumatic events in the future.

Questionnaires were distributed via an email invitation link. Data was collected online using SurveyMonkey.

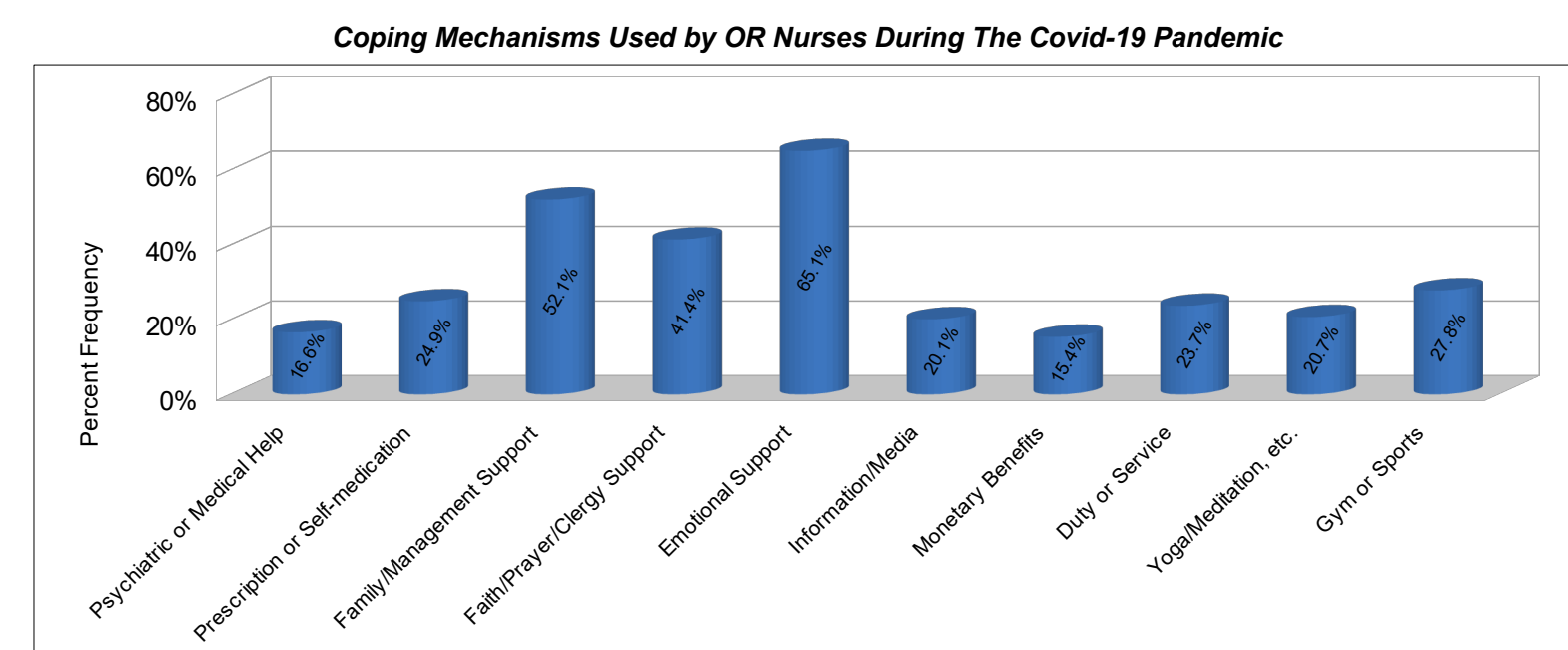
## Data Analysis

Data collected were analyzed using Statistical Analysis Software ( SAS ) Studio version 3.81.

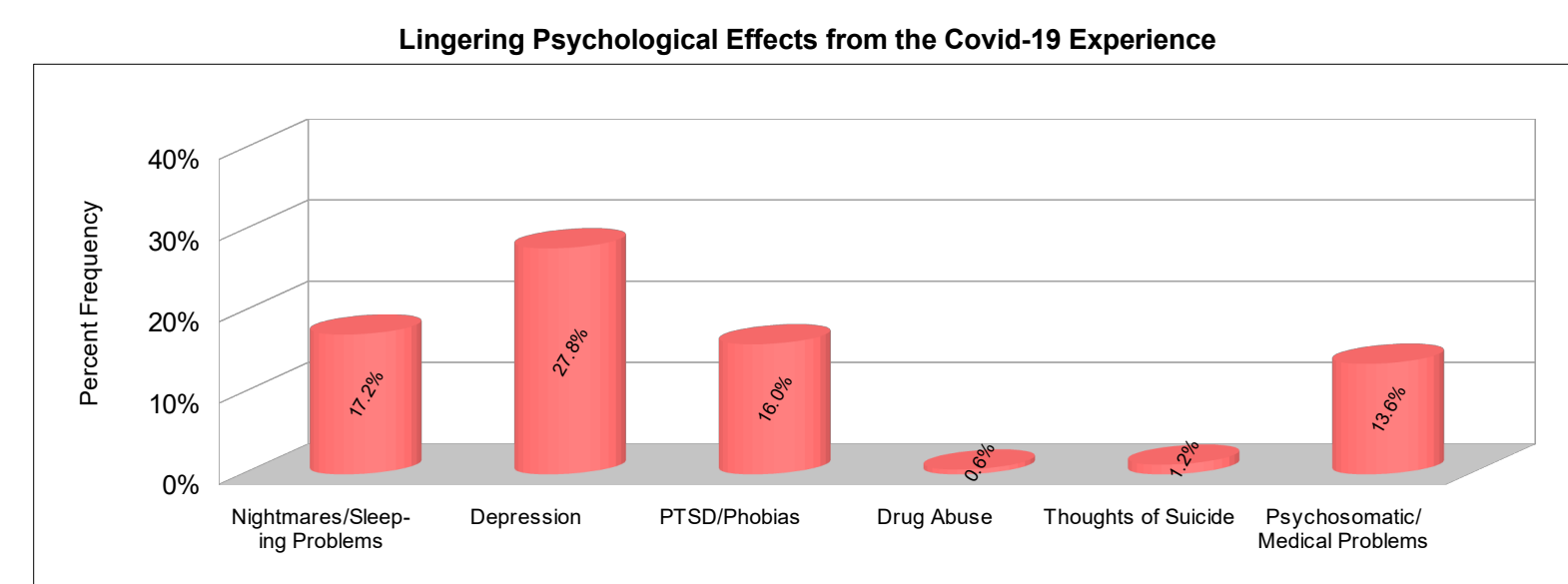
## Results



The top 5 Psychological Effects experienced by OR Nurses were **Fear and Anxiety, Depression or Sadness, Feelings of Isolation, Loss of Confidence to Self or Employer and Sleeplessness.**

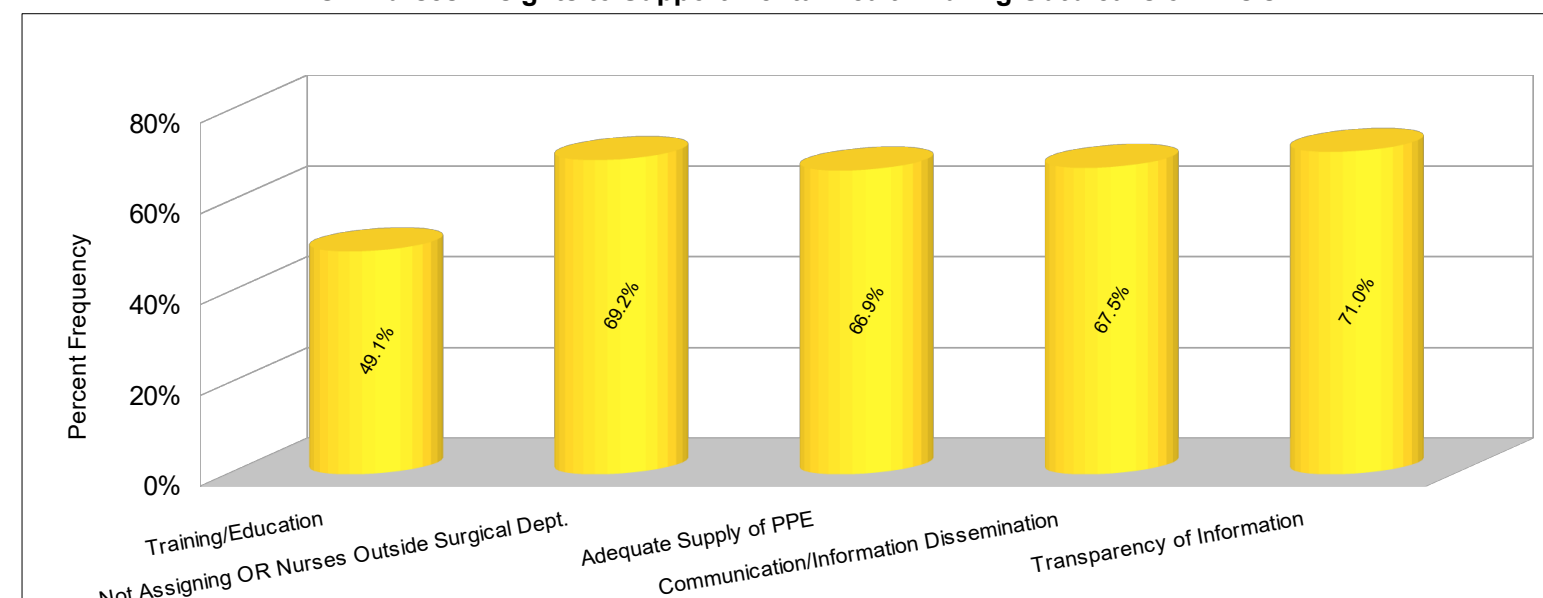


The top 5 Coping Mechanism used by OR Nurses were **Emotional Support, Family or Management Support, Faith/Prayer/Clergy Support, Gym or Sports and Prescription or Self-medication.**



The top 3 Lingering Psychological Effects were **Depression, Nightmares/Sleeping Problems and PTSD/Phobias.**

## OR Nurses' Insights to Support Mental Health During Outbreaks or Crisis



The top 3 Measures to Support Mental Health **Transparency of Information, Not Assigning OR Nurses Outside the Surgical Dept. and Communication/Information Dissemination.**

## Summarized Results of OR Nurses Top Responses Based on Demographics

Demographics	Category	Psychological Effects (Fear And Anxiety)	Coping Mechanisms (Support From Family / Emotional Support)	Lingering Effects From Covid 19 Experience (Depression)	Suggestions To Prevent Mental / Psychological Effects In The Future
Race/Ethnicity	White	88 (73%)	61 (71%)	38 (81%)	91 (76%) *
	Non-white	33 (27%)	25 (29%)	9 (19%)	29 (24%)
Sex	Male	9 (7%)	8 (7%)	1 (2%)	9 (8%)
	Female	113 (93%)	102 (93%)	46 (98%)	111 (92%) *
Marital Status	Single	33 (27%)	29 (27%)	15 (32%)	30 (26%)
	Married	75 (61%)	70 (64%)	24 (51%)	74 (64%) **
	Divorced / Separated	14 (12%)	10 (9%)	8 (17%)	12 (10%)
Age Group	20-29	43 (35%)	47 (43%)	17 (37%)	38 (33%)
	40-59	60 (49%)	48 (44%)	24 (52%)	59 (51%) **
	60+	18 (16%)	14 (13%)	5 (11%)	18 (16%)

(Using the highest frequency)

\* (Transparency of information on issues and events pertaining to incidence and treatment of the disease / condition)

\*\* (Not assigning OR nurses to unfamiliar care environment, i.e., care of ICU / critically ill / COVID patients)

## Interpretation

There are 166 OR nurses who participated in the recently conducted Psychological Impact of Covid-19 Pandemic on OR Nurses survey last February to April 2022, 159 of which were actively working in the clinical field. The bulk of respondents reside in the US while 4 came from Canada and 1 from the Kingdom of Saudi Arabia. The mean age of the respondents was 45 years old. Female nurses ( 92.3 % ) dominated the males ( 8% ). Most of the surveyees were married or single White Americans who lived in Texas, California and Connecticut. All except one admitted providing direct patient care during the Covid-19 outbreak. Outpatient Surgery and Surgical Floors, Pre-op, PACU, Medical Floors and ICU were the most common areas of deployment.

Fear/Anxiety ( 72.8 % ) was the most common psychological problems encountered by our surgical front liners, with Depression as the prevalent lingering effects. To prevent these psych issues, OR nurses demand Transparency of Information. Emotional Support was the universal choice as effective coping mechanism during the viral surge.

Certain demographic factors affect how OR nurses react, respond and cope with mental stress during the Covid-19 pandemic. More Non-white nurses ( 64% ) consider Faith, Prayer and Clergy

Support as an important coping mechanism compared to their White colleagues ( 35% ). Emotional Support ( 83% ) and Monetary Benefits ( 28% ) were favored by the younger generation ( 39 y/o & below ) as contrast to the older group ( 60 & above ).

Significant difference was also found on the psychological effects of Covid-19 crisis between male nurses (7%) and female nurses (93%) and between younger (35%) and older nurses (16%).

OR nurses' views also vary significantly regarding measures to protect OR nurses' mental health in future crisis situations, e.g., Training and Education for White ( 64% ) compared to Non-white ( 45% ) or Adequate Supply of PPE for the age group 39 & below ( 21% ) and 40-59 ( 42% ).

## Conclusion / Discussion

The Psychological Impact of COVID-19 Pandemic on OR Nurses provided significant information relevant to the Nursing profession today, particularly in the surgical nursing specialty. OR nurses, smart, resilient, and tough as they are, are not exempted from the human flaws of fear and dread of death and suffering. Whatever demographic climate they belong to, however experienced and knowledgeable they are, they still feel doubt and uncertainty when deployed to areas outside their expertise. Under conditions of constant fear of the unknown, moral injury and burnout, these groups of nurses will slowly succumb and develop psychiatric issues that can lead to mental distress, worker fallout and adversity towards the nursing profession. Therefore, it is imperative that healthcare systems and the government should work together to create laws and policies to protect the overall health and well-being of all medical professionals. The healthcare industry should nurture a climate of sincere financial, political, and social support and freedom that allows for the nursing workforce to balance their obligations and duty to care for themselves, their patients, and their loved ones.

## Perioperative Nursing Implications

Nurses are considered to be the largest workforce in the medical community, but they are not an infinite source. It takes years to find an experienced and dedicated nurse, but it only takes a few minutes to lose one.

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