

# Impact of COVID-19 on Mental Health of the Healthcare Professionals Deputed in COVID-19 Areas

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## Abstract

The study was conducted in a quaternary care hospital to see the impact of COVID-19 pandemic on the mental status of healthcare workers using DASS-21 scale. In this study, only healthcare workers that were directly involved in patient care in the COVID-19 units were involved. Questionnaire was shared with all the participants as a google form tool which was shared via email.

Responses were analyzed using SPSS version 20.0. For statistical analysis the Chi Square test was applied to the categorical data.

**Keywords:** COVID-19, stress, anxiety, depression, mental health, healthcare staff, compassionate leadership

## Introduction

With the spread of Corona virus (COVID-19) across the globe and its associated morbidity and mortality the healthcare systems were challenged regardless of their public or private construct. During the pandemic, the world faced a social and economic paralysis resulting in additional stressors related to life-certainty, social fabric, financial stability, and adaptation to the constantly evolving practices and recommendations. Healthcare organizations like all other industries faced similar challenges but rather with more profound implications due to their central role in pandemic management. These included surge in the demand for healthcare workforce, long work-hours, often with challenged resources including essential personal protective equipment (PPE) and advanced infrastructure. Furthermore, the continuous use of PPE for long hours was an additional source of discomfort and added stress. An important aspect which remained under-recognized and rather inadequately addressed was the impact of the paradigm shift on the mental health of the healthcare workforce including Physicians, Nurses and other healthcare Staff.

The organizations employed peer-support groups, dedicated counselling sessions, awareness campaigns, virtual meeting platforms, and training/educational resources were developed to adapt to the new normal. At our hospital (a Joint Commission International accredited tertiary care teaching hospital with four active transplant programs), a study was conducted to evaluate the impact of COVID-19 on mental health of the healthcare professional deputed in COVID-19 units. The hospital employed staff-centered counselling sessions that carried an immediate and positive impact on their mental well-being. These meetings, gave all professionals the opportunity to voice their concerns. These sessions were further reinforced with daily trainings and updated information was shared which lead to increased confidence of healthcare professionals in the organizational support system and subsequently strengthened work performance in these testing times.

## Aim

The purpose of this study was to analyze the impact of COVID-19 on the mental health of the front-line Healthcare workers, and the impact of implementable strategies in a quaternary care hospital setting.

## Methodology

A concurrent study by using DASS-21 scale was conducted to evaluate the stress, anxiety and depression among the health staff. An online questionnaire using google form was designed and DASS-21 was used as the screening tool. This was shared with all the staff including Doctors and Nurses who were working in the COVID units. Total of 550 participants filled the form which included Doctors and Nurses working in the COVID units. Out of these 250 were male and 300 were female.

The questionnaire responses were analyzed through the scale and was statistically analyzed using SPSS-Version 20.0. Chi -square test was applied to the categorical data. In the meantime, the management decided to meet all department to discuss myths and shared the employee friendly policies, isolation facility for staff with COVID-19 living in hostels and full health coverage for employee and family. After the intervention, a follow-up data using the same methodology was collected, DASS-21 was shared with the staff and the results were analyzed using SPSS version 20.0. The Chi square test was applied to the categorical data.

## Result (Before Sessions)

Total number of staff who worked in the COVID-19 unit were around 600 and the link was shared with all the staff who had worked in the COVID-19 unit. 550 of them responded. The response rate was 91.66%, among these 15% of the participants had mild anxiety, 26% had moderate anxiety, 9% had severe anxiety and 3% had extremely severe anxiety, while 47% were considered normal as per the response submitted on the questionnaire. In regards to depression, 33% of the staff had mild depression, 10% had moderate depression, 2% had severe depression, and only 1% had extremely severe depression, while 54% were considered normal. With regards to stress, among these 20% of the staff had mild stress, 11% had moderate stress, 16% had severe stress, and only 12% had extremely severe stress, while 41% were considered normal as per the response submitted on the questionnaire. Chi- square test was used to calculate association between genders and DASS-21 scores. P value of <0.001% were obtained for stress, depression and anxiety. Frequency distribution showed that female staff experienced more stress, depression and anxiety than male staff.

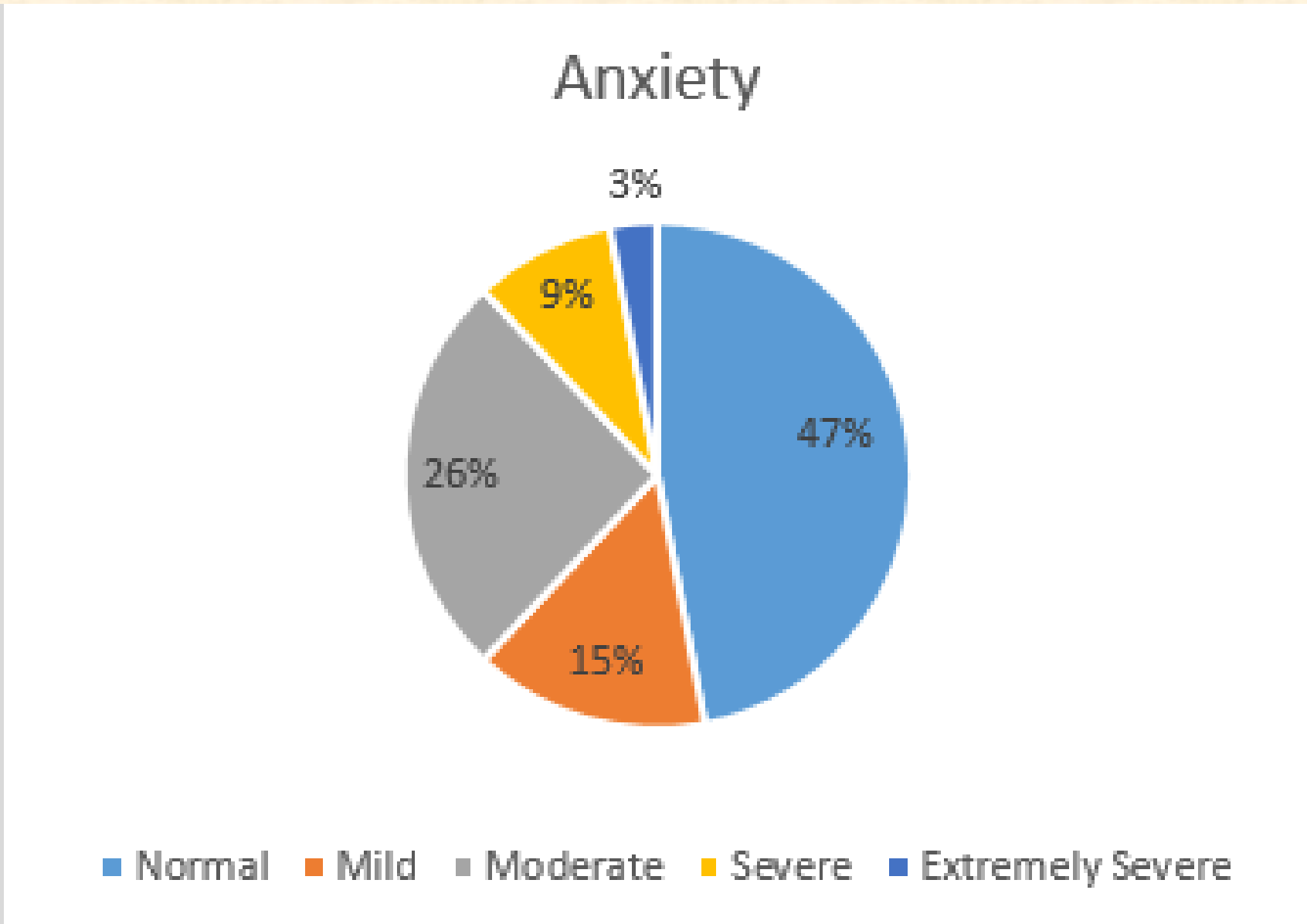


Fig:1 Indicates the distribution of Anxiety among the healthcare worker who participated in the study.

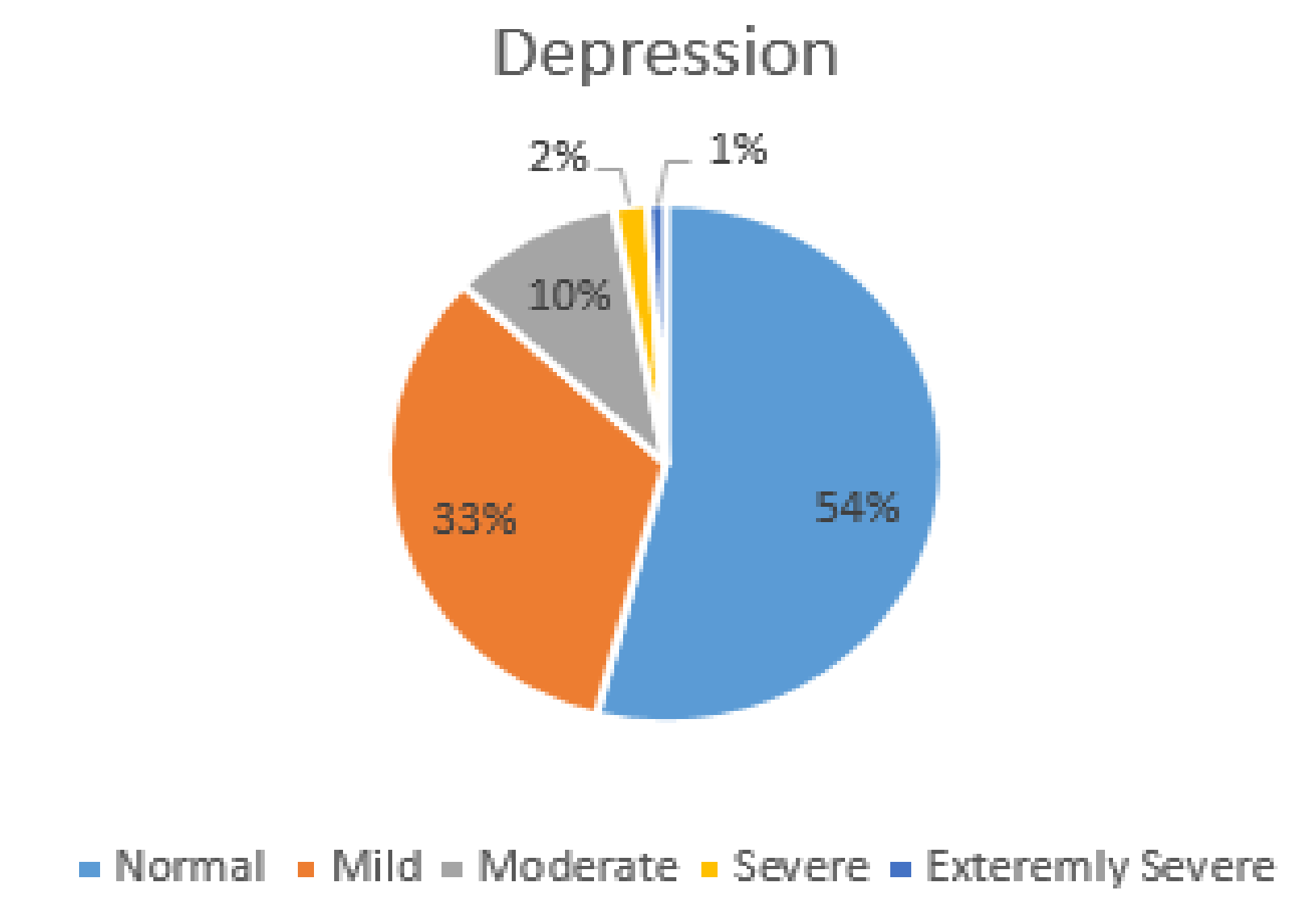


Fig:2 Indicates the distribution of Depression among the healthcare worker who participated in the study

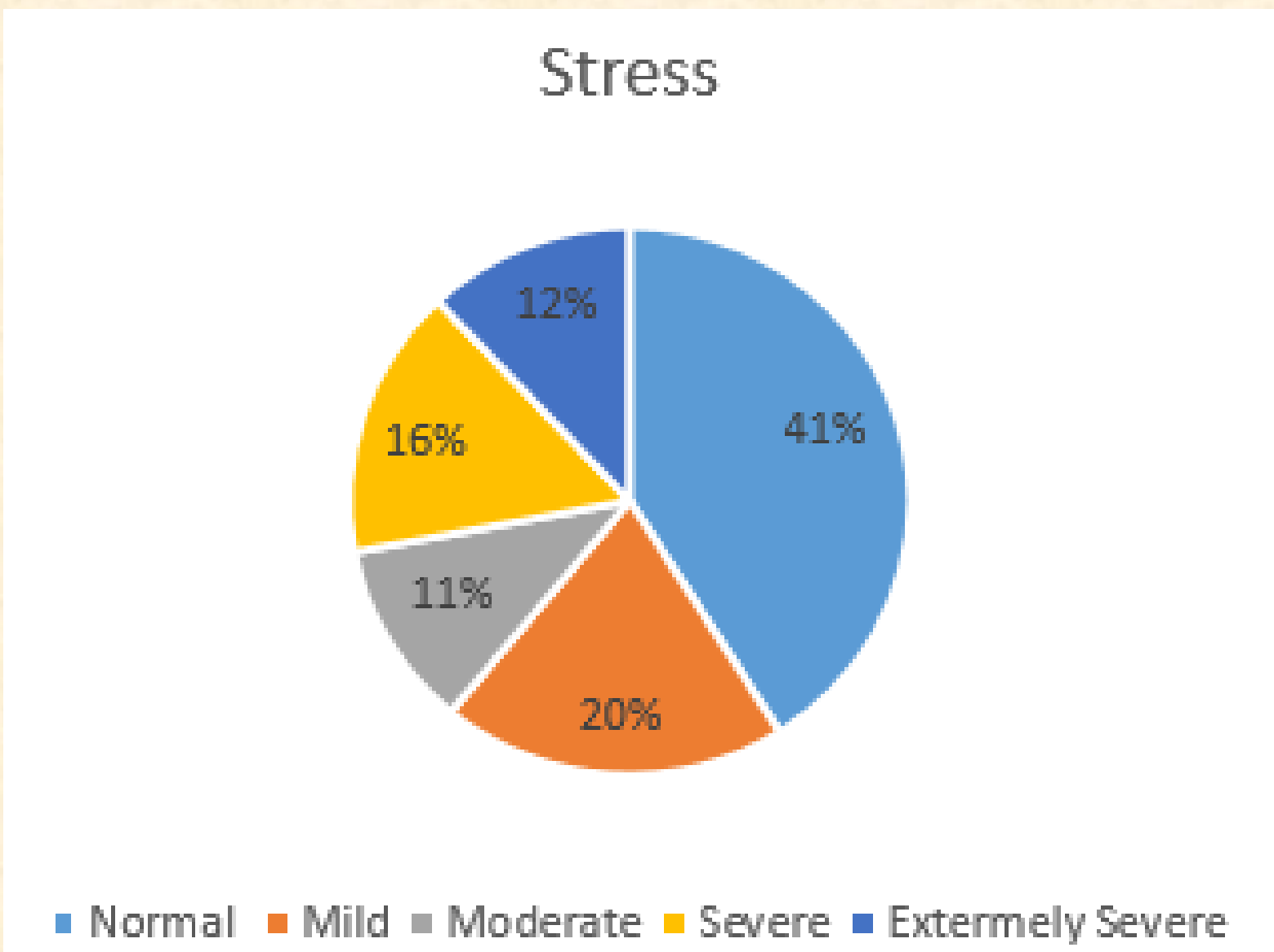


Fig:3 Indicates the distribution of Stress among the healthcare worker who participated in the study.

## Result (After Sessions)

Questionnaire was again shared with the staff and this time out of 600 total 575 responses were received. The response rate was 95.83%, among these 7% of the staff had mild anxiety, 8% had moderate anxiety, 3% had severe anxiety, and only 2% had extremely severe anxiety, while 80% were considered normal as per the response submitted on the questionnaire. In regards to depression, 17% of the staff had mild depression, 7% had moderate depression, 1% had severe depression, and only 1% had extremely severe depression, while 74% were considered normal. With regards to stress, among these 11% of the staff had mild stress, 5% had moderate stress, 7% had severe stress, and only 5% had extremely severe stress, while 72% were considered normal as per the response submitted on the questionnaire.

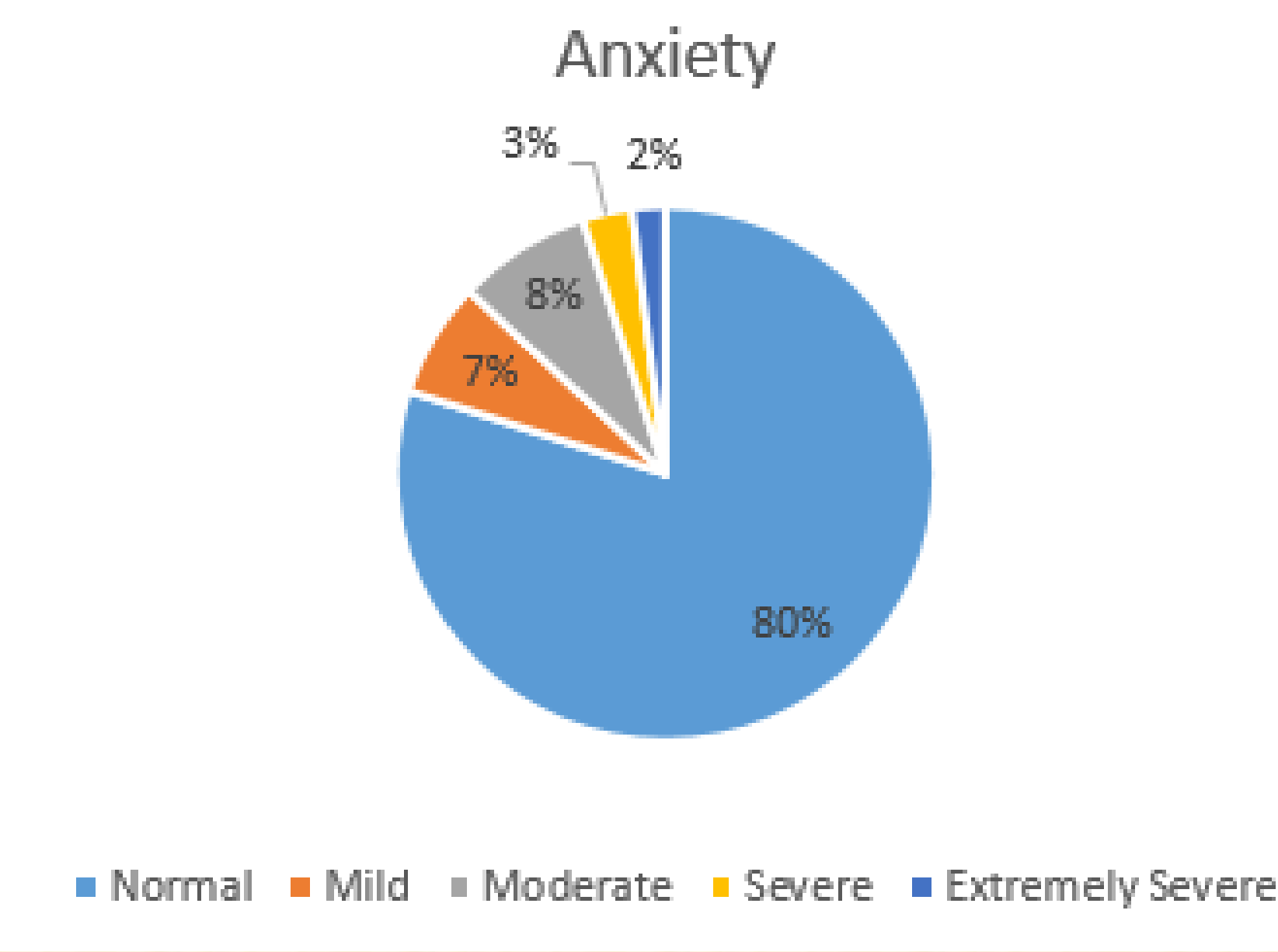


Fig:4 Indicates the distribution of Anxiety among the healthcare worker who participated in the study

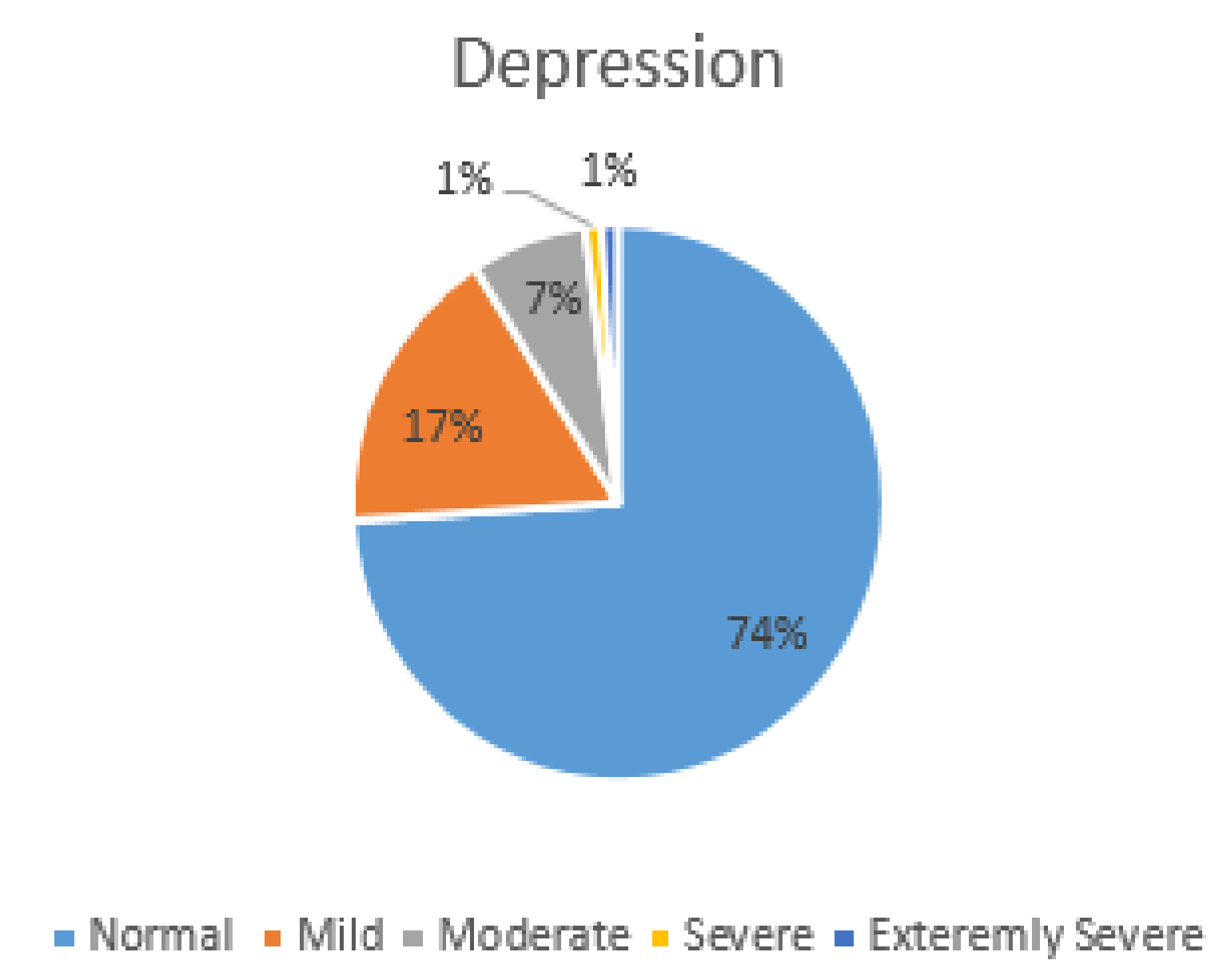


Fig:5 Indicates the distribution of Depression among the healthcare worker who participated in the study

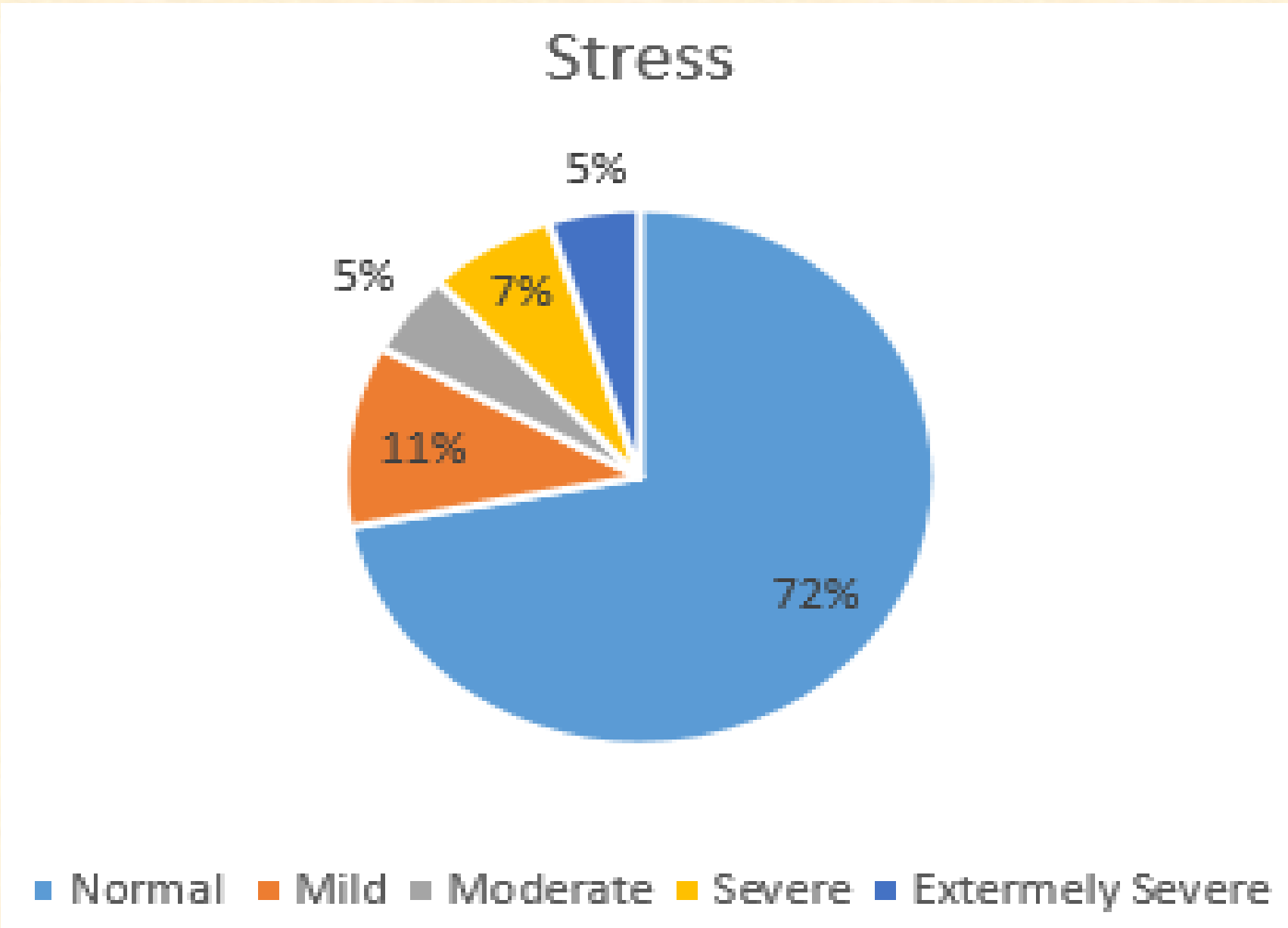


Fig:6 Indicates the distribution of Stress among the healthcare worker who participated in the study

## Conclusion

Our study revealed that three mental health issues i.e. Anxiety, Depression and Stress were prevailing with a higher frequency in our healthcare staff which included Doctors, Nurses and other paramedics working in the COVID-19 units and these levels showed decreased prevalence after the interventions. The study also revealed higher prevalence of these conditions in females. The results endorse our assumption that in times of uncertainty, timely management interventions using data-driven approach to address the psychosocial needs of the healthcare staff through enhanced communication channels and transparency and compassion can positively impact their mental health. Bidirectional communication channels are fundamental and pre-requisite for rapidly evolving literature, regulations and practices.

## References

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