

**A STUDY TO ASSESS THE LEVEL OF STRESS AMONG STAFF
NURSES DURING COVID-19 PANDEMIC
AT SELECTED HOSPITAL CHENNAI,
TAMILNADU, INDIA**



**A PROJECTWORK SUBMITTED TO SATHYABAMA INSTITUTE
OF SCIENCE AND TECHNOLOGY CHENNAI**

**IN PARTIAL FULFILMENT OF DEGREE
OF BACHELOR OF SCIENCE
IN NURSING**

2019-2023



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By

Ms. ANUSHIYA SHAKI S

Mr. ARAVINDH S

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CERTIFIED PROJECT WORK DONE BY

Ms. ANUSHIYA SHAKI S

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**SATHYABAMA COLLEGE OF NURSING,
SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CHENNAI**

**SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
BACHELOR OF SCIENCE
IN NURSING**

**SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

CHENNAI

2019 – 2023



RESEARCH GUIDE



DEAN

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BONAFIDE CERTIFICATE

This is a bonafide work done by Ms.Anushiya Shaki S and Mr.Aravindh S B.Sc. (N) III Year students from Sathyabama College of Nursing, Sathyabama Institute of Science and Technology, Chennai, submitted in partial fulfillment for the Degree of Bachelor of Science in Nursing under the Sathyabama Institute of Science and Technology(Deemed to be University) , Chennai.

College Seal



Signature of the Dean

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ENDORESEMENT BY THE RESEARCH GUIDE

This is to certify that the project work entitled “**A study to assess the level of stress among staff nurses during covid-19 at selected hospital Chennai, Tamil Nadu**” is a bonafide research work done by Anushiya Shaki S, Aravindh S of Sathyabama College of Nursing, submitted for the partial requirement of Degree Bachelor of Science in Nursing.



**SEAL AND SIGNATURE OF
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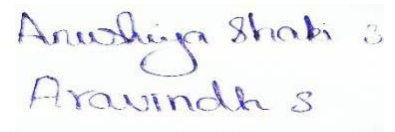
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DECLARATION

We hereby declare that the present project report entitled “A study to assess the level of stress among staff nurses during covid-19 at selected hospital Chennai, Tamil Nadu”. Is the outcome of the original research work undertaken and carried out by us under the guidance of Mrs.Prathiba M.Sc.(N),Sathyabama College of Nursing,Chennai.

We also declare that the material of this project report as not formed in anywhere, the basis for the award of any degree in this university or any other university.

By



Arushiya Shakti 3
Aravindh S

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ABSTRACT

A study to assess the level of stress among staff nurses during covid-19 pandemic at selected hospital Chennai, Tamil Nadu was undertaken by Anushiya Shaki S & Aravindh S during the Academic year, 2021-2022 in partial fulfilment of their requirement for the degree of Bachelor of Science in nursing at Sathyabama College of Nursing. **Objectives:** To assess the level of stress among staff nurses. To associate the level of stress among staff nurses with demographic variables. To create awareness on stress adaptive behavior among staff nurses. **Conceptual framework:** The study framework was based on practice health promotion model (1987) to find the level of stress among staff nurses. **Approach:** Quantitative approach was adopted. **Design:** Descriptive Design was adopted. **Setting:** Staff nurses who are posted in Covid-19 ward at hospital Chennai. **Sample size:** The sample size was 60 staff nurses working in Covid-19 ward. **Sampling technique:** The probability random sampling technique was used. **Methods of data collection procedure:** Interview method using a structured questionnaire. **Results:** The result showed that 50 % of the sample had moderate stress, 35 % of samples had severe stress and 15 % of samples had mild stress. **Conclusion:** The present study assessed the level of stress among staff nurses during covid-19 pandemic. Thus, the investigation was done to assess the overall level of stress of each sample and appropriate measures were taken to ensure that the nurses receive adequate information and education regarding stress adaptive behavior.

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CHAPTER-1

INTRODUCTION

“Stress is nothing more than a socially acceptable form of mental ill”

-Richard Carlson

Stress is the “non-specific response” of the body to any kind of demand made upon it.

Stress is the arousal of mind and body in response to demands made upon them. Work-related means either caused by or made worse by work. If something is caused by work, there should be evidence that: It began occurring after a period of being at work or during work. It does not occur after activities. Determining the extent of stress related health problems at work is not an easy task.

Stress is a state of reaction to a person’s impairment of biological and psychological balance. As an inevitable consequence of life, all living creatures experience stress. Stress is a state of change that occurs automatically as a result of physical, mental and emotional stresses that causes positive and negative emotions and has physical and mental effects. There can be many sources of stress. The environment we live in, our body, our thoughts, and even how we see the world can be a stress factor. When we understand how individuals react under extremes of stress, many of the more subtle and unstretched forms of behavior will be immediately understandable. Stress is the defense mechanism of human being. In response to emotional or physical stress, the human body causes a complex physiological response that is known and yet not fully understood. It is important to understand the biology of the stress response and when it becomes pathological. Stress has multidimensional effects. Stress related symptoms can be grouped into four as physical, emotional, mental and social. There are some specific symptoms of stress.

Stress is defined as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being

Nursing is described as a stressful-profession and nurses are exposed to a great number of stressors in their working environment. According to the Occupational Health and Safety

Survey of the American Nurses Association (ANA), the main concern for the nursing staff with regard to health and safety in the work environment is the acute or chronic effect of stress. The work conditions in nursing imply the exposure to pain and death, interpersonal conflicts¹⁰ lack of autonomy and authority for decision making and the lack of definition of the professional role, which produce a state of chronic stress.

Early 2020, after a December 2019 outbreak in China, the World Health Organization identified SARS-CoV-2 as a new type of corona virus. The outbreak quickly spread around the world. COVID-19 is a disease caused by SARS-CoV-2 that can trigger what doctors call a respiratory tract infection. It can affect your upper respiratory tract (sinuses, nose, and throat) or lower respiratory tract (windpipe and lungs). It spreads the same way other corona viruses do, mainly through person-to-person contact. Infections range from mild to deadly. SARS-CoV-2 is one of seven types of corona viruses, including the ones that cause severe diseases like Middle East respiratory syndrome (MERS) and sudden acute respiratory syndrome (SARS). The other corona viruses cause most of the colds that affect us during the year but aren't a serious threat for otherwise healthy people.

Health-care workers (HCWs) in India and around the world are facing physical as well as psychological pressure, thereby adding to an existing baseline of psychological pathology. The fear of contagion spreads to their family, friends, and colleagues; prospect of more and longer shifts; finite supplies of personal protective equipment; unpredictable duty rosters; fear of bringing infection home; quarantine/isolation in hotels away from family and children; and lack of household help have been major sources of stress.

Besides, witnessing coworkers becoming ill, social ostracism, making tough allocation decisions about scarce, lifesaving resources such as mechanical ventilators are some noteworthy issues faced by them leading to high levels of stress

On March 11, 2020, the World Health Organization (WHO) declared corona virus (COVID 19) a pandemic, which means a global disease outbreak threatening the whole planet. COVID 19 is an infectious disease caused by corona virus. Corona viruses are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome. A novel corona virus is a new strain that has not been previously identified in humans. They are transmitted between animals and humans. They include fever, dry cough, shortness of breath and breathing difficulties, tiredness with possible symptoms of aches and pains, nasal congestion, runny nose, sore throat or diarrhea. Corona virus is a new virus which has been discovered with its outbreak in Wuhan, China, in December 2019. Now, it has spread at a lightning speed to affect several

countries. Frontline nursing and medical staff, especially in the early stages of epidemics, have suffered from stress due to high workload, insufficient personal protective equipment, lack of knowledge of the pathogen and direct contact with patients. Consequently, nurses have commonly reported to experience a greater decline of morale and decreased job satisfaction due to the nature of the profession. Therefore, mental health initiatives are important to support nurses and doctors during an unprecedented health crisis of a pandemic.

As the Covid-19 pandemic accelerated, the healthcare systems worldwide have been facing tremendous impact as the pressure on the healthcare system was rising. Exploring and identifying the issues that nurses are faced by the nurses during these testing times will help to support them and strengthen protocols, improve their preparedness and comfort them. An integrative review on the physical and psychological impact will explore the issues facing by nurses during response to the Covid-19 crisis.

The critical shortage of nurses, beds, and medical supplies, including PPE (personal protective equipment) are the major issues that the nurses are facing during this pandemic.

It is noteworthy to state that nurses faced many challenges resulting from an exponential increase in the demand for healthcare during COVID-19. These challenges included long work shifts, few resources, precarious infrastructure, and the lack of sufficient protective clothing also, many health care workers felt unprepared to conduct the clinical intervention of patients infected with a new virus with no established clinical protocols or treatments. Taking this into account, frontline health care staff members are one of the most vulnerable groups because they constantly deal with the threat of COVID-19 infection. It should be stressed that COVID-19 has been considered an emerging and easily clustering infectious disease. Because of the highly infectious nature of and limited knowledge about COVID-19, healthcare workers are under extreme physical and psychological pressure while on duty. They are not only at an elevated risk of becoming infected but also having been reported to experience related depression, anxiety, insomnia, physical discomfort, difficulty breathing and frustration. On reviewing the available literature, several studies have shown that patients are exposed to the highest levels of risk for contracting COVID-19. Nurses are particularly vulnerable to many job-related hazards and undergo a considerable number of emotional pressures in relation to their jobs because of their long, Intense exposure to various stressors. Clearly, it is important to note the nature of the coping strategies used by these health care and emergency workers in these situations and their effectiveness in terms of reduction and effectively coping up with stress.

Sajedeh Amjadi et al., 2022 has done cross-sectional study was conducted on 322 frontline nurses fighting against COVID-19 in hospitals affiliated to Mazandaran University of

Medical Sciences. Data were collected using the two following online questionnaires: the Perceived Stress Scale and World Health Organization Quality of Life-Brief. Data were compiled from October 23, 2020, to November 25, 2020. Data were analyzed using the independent sample t-test, Pearson's correlation test, and regression analysis test in the SPSS-21. Average perceived stress scores was 30.27 (standard deviation [SD] = 7.01). Average quality of life subscale scores consist of physical health, psychological health, social relationships, and environment were 57.71 (SD = 12.74), 44.3 (SD = 15.58), 45.61 (SD = 16.99), and 47.6 (SD = 18.11), respectively. There was an inverse significant association between all the subscales of quality of life and perceived stress ($P = 0.008$). Based on the multiple linear regression analysis, the variables of age, gender, marital status, and perceived stress were the significant predictors of quality of life subscales.

BACKGROUND OF THE STUDY:

The value of the nurses is identified as this COVID-19 pandemic collapsed the value of world. Nurses are being praised for their dedication but they are in the high-risk situation as lack of medical supplies especially high quality personal protective equipment which has led to even death of few nurses.

Vital group among frontline health care professionals is nurses who work across various settings such as tertiary hospitals, long term care agencies, schools, government healthcare agencies, nursing homes, community. Their multiple roles are vital especially in this COVID-19 pandemic. The nurses have critical roles and responsibilities during Covid-19 pandemic. They will continue to be at the front line of patient care in hospitals and actively involved with evaluation and monitoring. A global pandemic needs strong nursing staff engagement in clinical management, awareness and knowledge exchange, and public safety.

Firdousa Jan, et al., 2017 conducted a comparative descriptive study among staff nurses. Sample of 120 staff nurses were selected randomly from the list of 356 staff nurses working in the SKIMS hospital with the use of a probability simple random sampling technique. Perceived stress scale was used for measuring stress level among staff nurses. The findings of The study suggested that 30 (50%) of staff nurses had severe level of stress, whereas 27 (45%) of staff nurses had moderate level of stress and 3(5%) were under mild level of stress, while as in general wards majority 39(65%) of staff nurses had moderate level of stress scores, whereas 12(20%) were under severe level of stress scores and 9 (15%) were under mild level of stress. So, there is significant difference in level of stress between staff nurses working in emergency and general wards ($P = 0.002 < 0.05$).

NEED FOR THE STUDY

Corona virus disease (COVID-19) pandemic has spread to 198 countries, with approximately 2.4 million confirmed cases and 150,000 deaths globally as of April 18. Frontline healthcare workers (HCWs) face a substantially higher risk of infection and death due to excessive COVID-19 exposure. This review aimed at summarizing the evidence of the physical and mental health impacts of COVID-19 pandemic on health-care workers (HCWs).

Health and care workers are the foundation of health systems and the driving force to achieving universal health coverage and global health security. Their commitment and professionalism throughout the pandemic are evident to all: extraordinary people, performing extraordinary work. However, too many of them have become infected, ill or died as a result of COVID-19. WHO estimates that between 80 000 and 180000 health and care workers could have died from COVID-19 in the period between January 2020 to May 2021 converging to a medium scenario of 115 to 500 deaths. These deaths are a tragic loss. They are also an irreplaceable gap in the world's pandemic response.

In India many nurses have sacrificed their life in the care of Covid-19 till date. India does not have a strong association of Indian nurses such as that of Indian Medical Association which has taken the responsibility of routing out insurance for Covid-19 martyrs. Therefore, no Nurses Associations of India were following up the data on nurses who died due to caring for Covid-19. Over 2,500 more nurses are set to join the fight against COVID-19 in the State. According to data in the Indian Medical Association (IMA) COVID-19 Registry, a total of 49 health care workers both in the government and private sectors have died of COVID-19 in Tamil Nadu during the second wave of the pandemic.

Abdelaziz Hendy et al., (2021) has done cross-sectional study conducted in five Isolation governmental hospitals for COVID-19. 374 nurses included at the study. Characteristic forms, factors affecting nurses' stress and Nursing Stress Scale (NSS) were used to collect data. The findings of The study suggested that 52.1% of the nurses Who participated in the study had moderate Level of total nursing stress scale. 26.2% of Nurses has severe level, 13.4 % of them had Mild level while only 8.3 of them are at Normal level. Mean SD score of studied Nurses regarding total nursing stress scale Was 99.47 ± 10.671 . Training for COVID-19, availability of PPE, educational level and attention of hospital administration were negative predictor factors for nurses' stress, while having children, people showed that COVID-19 is stigma, fears of infection, workplace, fear of transmission infection for family and nurse to patient ratio were positive predictors.

STATEMENT OF THE PROBLEM

A study to assess the level of stress among staff nurses during covid-19 pandemic at selected hospital Chennai.

OBJECTIVES OF THE STUDY

- To assess the level of stress among staff nurses.
- To associate the level of stress among staff nurses with demographic variables.
- To create awareness on stress adaptive behavior among staff nurses.

OPERATIONAL DEFINITION

Study:

Study is the act of learning and spending time discovering information or an academic work or investigation about a particular thing or subject area.

Assess:

It refers to the act of gathering data on the knowledge on cyber safety by using self-structured interview questionnaire prepared by the investigator and analysis of data using statistical methods.

Level:

Level is in an experimental design, the quantity, magnitude, or category of the independent variable (or variables) being studied.

Stress:

Stress is a bodily reaction to a change which needs response, regulation, and/or physical, psychological, and or emotional adaptation.

Staff nurses:

It refers to a person trained in the scientific basis of nursing, meeting certain prescribed standards of education and clinical competence.

Covid-19:

Covid-19 is an acute respiratory illness in humans caused by a corona virus, capable of producing severe symptoms and in some cases death, especially in older people and those with underlying health conditions. It was originally identified in China in 2019 and became pandemic in 2020.

Pandemic:

A pandemic is a disease outbreak of that spreads across countries. It affects more people and takes more lives an epidemic. The World Health Organization declared covid-19 to be a pandemic when it became clear that the illness was severe and that it was spreading quickly over a wide area.

Hospitals:

Hospital refers to an institution that is built, staffed, and equipped for the diagnosis of disease; for the treatment, both medical and surgical, of the sick and the injured; and for their housing during this process.

HYPOTHESIS:

▪ H1- There will be significant association between the level of stress among staff nurses with demographic variables.

ASSUMPTION:

Staff nurses have stress during covid-19 pandemic.

DELIMITATIONS:

- The study is limited to a period of 1 week.
- The study is limited to staff nurses who are working in Covid-19 ward.
- The study is limited to 60 samples

CONCEPTUAL FRAMEWORK

A conceptual framework includes one or more formal theories (in part or whole) as well as other concepts and empirical findings from the literature. It is used to show relationships among these ideas and how they relate to the research study. Conceptual frameworks are commonly seen in qualitative research in the social and behavioral sciences, for example, because often one theory cannot fully address the phenomena being studied. The conceptual framework adopted for the study was based on “Pender’s Health Promotion Model (1987)” Health promotion model is directed towards increasing the level of wellbeing and self-actualization in a given individual group. The model focuses on the aspects of modified factors, cognitive perceptual factors, participating in health promotion behavior.

Modifying Factors

In this study, the modifying factors are demographic variables of staff nurses. This includes age, sex, marital status, income and years of experience.

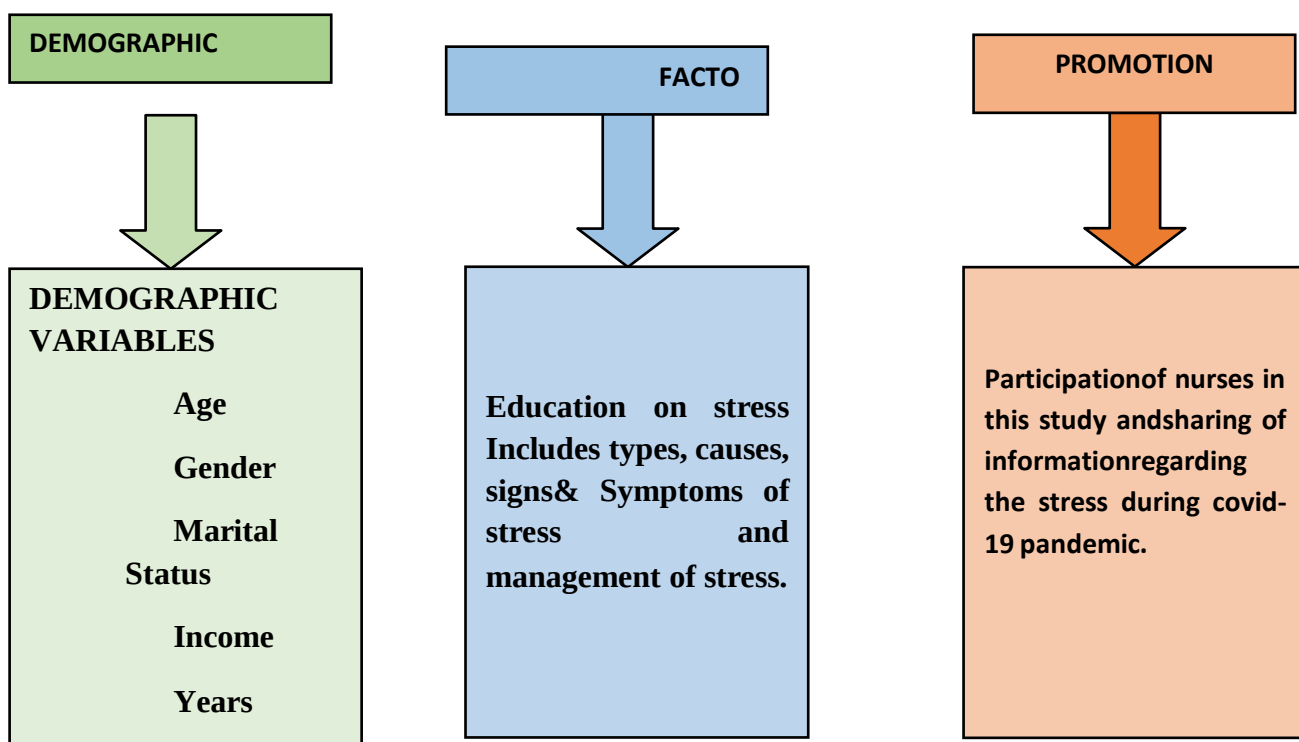
Cognitive perceptual factor:

It refers to the health education program on stress. This includes information about stress, the types of stress., causes of stress, signs and symptoms of stress and management of stress.

Participating in health promotion behavior:

According to this model, health promoting behavior should result in improvement of mental health and better quality of life at all stages of development.

The individual's participation in this study is considered as one of the health promoting behaviors, as this will help nurses identify and adopt measures for promoting stress.



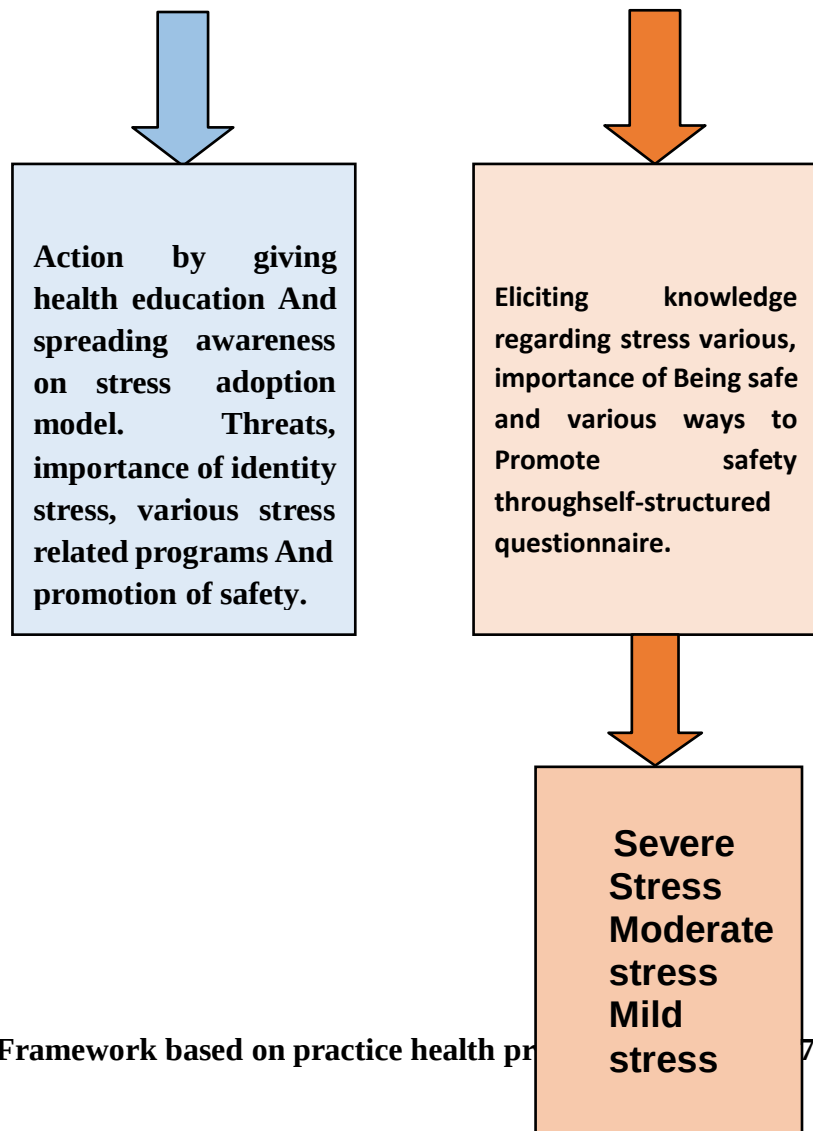


Figure 1: Conceptual Framework based on practice health pr 7)

CHAPTER II

REVIEW OF LITERATURE

REVIEW OF LITERATURE

According to, BT. Bsavanthappa (1998) review of literature was a key step in the research process. It refers to an extensive and systematic examination of publications relevant to research project. The extensive review was made to strengthen the present study in order to lay down the foundation which helps us to reveal the prevailing situation of the similar studies in different areas. The related literature of this study was presented in the following sections.

- Literature review related stress among staff nurses
- Literature review related to stress among staff nurses during covid-19 pandemic

Literature review related stress among staff nurses:

Golam Kibria. Md et al., (2018) has done prevalence of stress and coping mechanism among staff nurses of intensive care unit in a selected hospital, a descriptive cross-sectional study was conducted among 50 nurses in ICU ward at Bangladesh hospital. Results shows 90% had experience stress ,72% had experience back pain physical stress. Majority of nurses (64%) had experienced boredom as psychological stress. Most of nurses (62%) had experienced common mistakes or errors during work. 74% nurses used prayers and 88% nurses used sharing problems with others in coping stress. Majority (86%) of nurses were having diploma in nursing. Most of nurses (68%) had been working experience of more than three years. 100% nurses feel much stressed when one nurse give care to the more than one patient. There is no association between stress and work stressors (work experiences stressful impact on the health and well-being of critical care nurses due to stress.

Mirela bidilica, viorica nedelcu et al., (2018) Conducted a descriptive study occupational stress among ICU nurses at Romania , in this study 143 nurses were participated , stress estimated with job stress scale and result revealed that 51% of nurses were under high level of stress .factors affecting occupational stress in ICU nurses ,are making critical in the spot decision ,assignment of disagreeable duties ,assignment of increase responsibility, excessive paper work poor quality of equipment ,meeting dead line ,Covering work for another employee, insufficient personnel. High level of stress in ICU nurses were excessive paper work, insufficient personal time, covering for another employee, meeting dead line.

Azizollah Arababisarjou et.al., (2017) Conducted a descriptive analytical study of job stress among nurses working in teaching hospitals at Iran. In this study 180 nurses were participated, Finding indicated that average working experienced of nurses was 7.31 ± 5.95 and their average age was 30.97 ± 6.49 and 136 nurses were female. Job stress score also was 115.44 which are moderate stress score. 142 nurses experienced moderate stress.38 of them were experienced high stress and none of nurses experienced poor stress, the relationship between age, gender, and experience with job stress variable.

Godwin Adzakaph ,Alexander s.Laar (2017) Conducted a descriptive study of occupational stress among nurses in a hospital in Gana, in this study 73 nurses were participated ,stress measured with the tool of Wei man Occupational Stress Scale and study resulted average level of occupational stress with mean score and individual average score of 37.01 and indicating a 10% higher than the hospital were found to experience above average levels of occupational stress with the mean score and individual average score of 37.01 and 2.47 indicating a 10% higher than the established Weiman Occupational Stress Scale mean score of

33.75 and individual average of 2.25. The study also found that the most common stressors were workload, inadequate resources and conflicting demands whilst the most common strategies the workers used for managing stress were resorting to hobbies, identifying the source of stress and avoiding unnecessary stress, managing time better, adjusting to standards and attitudes and expressing their feelings instead of bottling them up.

Literature review related to stress among staff nurses during covid-19 pandemic

Eman Abdelaziz Rashad Dabou, RN. et al., (2022) has done cross-sectional survey among nurses working in the Isolation and Intensive care units of two selected hospitals in the United Arab Emirates. A convenience sampling technique was used for sample selection. Each participant completed an online survey via Google forms of two validated instruments: a 10-item scale to measure perceived stress levels and a 15-item Stress management inventory. The completed questionnaires were analyzed on SPSS version 25. The overall regression of demographic covariates on stress management behaviors was not statistically significant [$F = (1.015), (0.602), (0.909), (1.286), p > 0.05$]. The study's findings accentuate work-related stress caused by the current pandemic. Nurses in this study indicated that delegation of responsibilities and developing resilience were helpful interventions to manage work-related stress.

Shylaja Jeyapaul et al., (2022) has done analytical cross-sectional study addressed to examine the prevalent perceived job stress and covid-19 related perceived job stress predictors among nurses. A web-based google form English questionnaire was designed in sections aimed at collecting socio demographic and job variables, including the Perceived Stress Scale (PSS) and the Covid-19 pandemic related job stress predictor questionnaire. The data were collected using convenient sampling technique 164 nurses have participated in this study among them, the overall nurses 97.57 % had experienced job stress during peak time of Corona virus spread and of them more than half (59.76 %) of the (98) nurses had moderate level. This study revealed that job stress is a common prevailing problem among nurses and the COVID-19 pandemic related job stress predictors were perceived safety risk and perceived worry about health while covid-19 exposure and perceived work difficulty as overworked during pandemic.

Johannes H. De Kock et al., (2021) has done rapid review of the literature following guidelines by the WHO and the Cochrane Collaboration's recommendations. We searched across 14 databases, executing the search at two different time points. We included published, observational and experimental studies that reported the psychological effects on HSCWs during the COVID-19 pandemic. The 24 studies included in this review reported data predominantly from China (18 out of 24 included studies) and most sampled urban hospital

staff. Our study indicates that COVID-19 has a considerable impact on the psychological wellbeing of front-line hospital staff. Results suggest that nurses may be at higher risk of adverse mental health outcomes during this pandemic, but no studies compare this group with the primary care workforce. Furthermore, no studies investigated the psychological impact of the COVID-19 pandemic on social care staff. Other risk factors identified were underlying organic illness, gender (female), concern about family, fear of infection, lack of personal protective equipment (PPE) and close contact with COVID-19. Systemic support, adequate knowledge and resilience were identified as factors protecting against adverse mental health outcomes. The evidence to date suggests that female nurses with close contact with COVID-19 patients may have the most to gain from efforts aimed at supporting psychological well-being. However, inconsistencies in findings and a lack of data collected outside of hospital settings, suggest that we should not exclude any groups when addressing psychological well-being in health and social care workers.

Shasha Cui et al., (2021) has done online cross-sectional study recruited participants through snowball sampling between 13 February and 20 February 2020. Nurses self-administered the online questionnaires, including a general information questionnaire, the Self-Rating Anxiety Scale, the Perceived Stress Scale-14, and the Simplified Coping Style Questionnaire. Effective measures are necessary to preserve mental health of nurses in emergency departments and fever clinics. These include strengthening protective training, reducing night shifts, ensuring adequate rest time, and timely updating the latest pandemic situation.

Fahad Nadeem et al., (2021) has done cross-sectional study was conducted from 1st May to 15th June 2021 among all nurses working in Sandeman Provincial Hospital, Quetta (SPHQ). Established in 1939 and located in the center of the city, SPHQ is 800-bedded tertiary care, teaching institute. The hospital provides both inpatients as well absolute patient services. Patients typically prefer to approach SPHQ because of affordability and hence SPHQ is the institute of choice for the majority of the residents. Out of the 325 nurses, 297 participated in the study with a response rate of 91.3%Thirty (10.1%) worked in COVID-19 wards while the rest were stationed at the regular wards. Most participating nurses were female 91.5% (n = 272), and most were married 62.2% (n = 185). As many as 51.5% (n = 152) had been working in the hospital for 10 years or less and 48.8% (n = 145) had a nursing diploma as the highest level of education in nursing.

Sheryl C. et al., (2020) has done quantitative approach with descriptive design was used for the study and convenient sampling was used with the sample size being among 83 nurses. Standardized scale known as DASS-21 (Depression, Anxiety and stress scale) scale was

used for the collection of data. To analyze the data, inferential statistics was used. The major findings of the study showed that majority of the Nurses (34%) (N=28) had moderate anxiety. Also, majority of them (75%) (N=63) did not find any symptoms of depression. A majority of (48%) (N=40) had moderate level of stress. The findings of the study suggest that working in the Covid-19 have both negative and positive impact on the emotional impact of the Nurses. Providing required basic needs and support both physical and psychological plays a vital role in maintaining the mental health of the Nurses.

Jayadev P S. et al., (2020) has done descriptive cross-sectional survey was conducted using purposive sampling technique. A total of 190 nurses were participated in the study. Results: The survey report showed a moderate level of stress perceived by the majority of nurses. There was a statistically significant association found between perceived levels of stress with demographic variables like age, education, and experience at $p < 0.05$ level, but no significant association existed between gender and level of stress perceived. Conclusion: Effective management of pandemic should be a priority for healthcare organizations and adequate training has to be given for health care workers.

Judith E Arnetz et al., (2020) has done cross-sectional online survey was conducted among a sample of 695 U.S. nurses in May 2020. Content analysis was conducted on nurses' responses ($n = 455$) to an open-ended question on the most stressful situations they had experienced during the pandemic. Six distinct themes emerged from the analysis: exposure/infection-self; illness/death-others; workplace; personal protective equipment/supplies; unknowns; opinions/politics. Two sub-themes concerned restrictions associated with the pandemic and feelings of inadequacy/helplessness regarding patients and their treatment. More than half of all comments concerned stress related to problems in workplace response to the pandemic. Healthcare institutions should provide opportunities for nurses to discuss the stress they are experiencing, support one another, and make suggestions for workplace adaptations during this pandemic.

Sébastien Couarraze et al., (2020) has conducted an international prospective observational study on the general population during the pandemic period of COVID-19 from March to October 2020. We used a computerized anonymous online questionnaire, accessible through the website COVISTRESS.ORG. The questionnaire was translated into ten languages. The questionnaire was hosted by the University Hospital of Clermont-Ferrand, using the Redcap® software. To facilitate its diffusion, the questionnaire was disseminated by any mean (social media, radio, television, internet, mailing lists, etc.). Respondents were informed of the objective of the survey prior to answering the questionnaire. They were also informed that their data would be used anonymously for research purposes. This study was approved by the South-

East VI Ethical Committee of France (Clinicaltrials.gov NCT04538586). The ethics committee waived the need for written consent considering that respondents gave their consent by answering to the questionnaire, and that they could also withdraw at any time. The questionnaire was distributed using the international COVISTRESS network. It was disseminated to the general population without distinction of country, gender, occupation or disease. The result showed the level of work-related stress during the pandemic was influenced by profession. Healthcare professionals had levels of stress 25.8% higher than the general population ($p < 0.001$). Among healthcare workers, paramedical staff had levels of stress 12.7% higher than medical doctors ($p < 0.001$). Regardless of occupational category, women were systematically more stressed than men (between 12.2% and 20.7% depending on occupational category, $p <$

Working under unusual conditions did not have an impact on healthcare professionals' job stress.

CHAPTER – III

RESEARCH METHODOLOGY

METHODOLOGY

This chapter deals with the research approach ,research design, the variable of the study, the setting, of study population, sample size, sampling technique, selection criteria, development and description of tool, content validity, , data collection ,procedure and plan for data analysis. This study is aimed to assess the level of stress among staff nurses during covid-19 pandemic.

RESEARCH APPROACH

Research approach is important element of research .It is a systematic plan of steps involved in research. In this study assess the level of stress among staff nurses during covid-19 at selected hospital Chennai, were assessed .By this quantitative approach was adopted for this study.

RESEARCH DESIGN:

This study was descriptive in nature and used the questionnaire method of collecting data.

STUDY SETTING:

The study was conducted in staff nurses who are posted in Covid-19 ward at Chennai.

SAMPLE:

Staff nurses working in hospital Chennai, who fulfilled the inclusive criteria of sampling criteria.

SAMPLE SIZE:

60 samples of staff nurses working in Covid-19 ward.

SAMPLING TECHNIQUE:

All the female and male nurses working in Covid-19 ward who fulfilling inclusive criteria were selected by non probability (convenient) sampling method for this study.

CRITERIA FOR SAMPLE SELECTION:

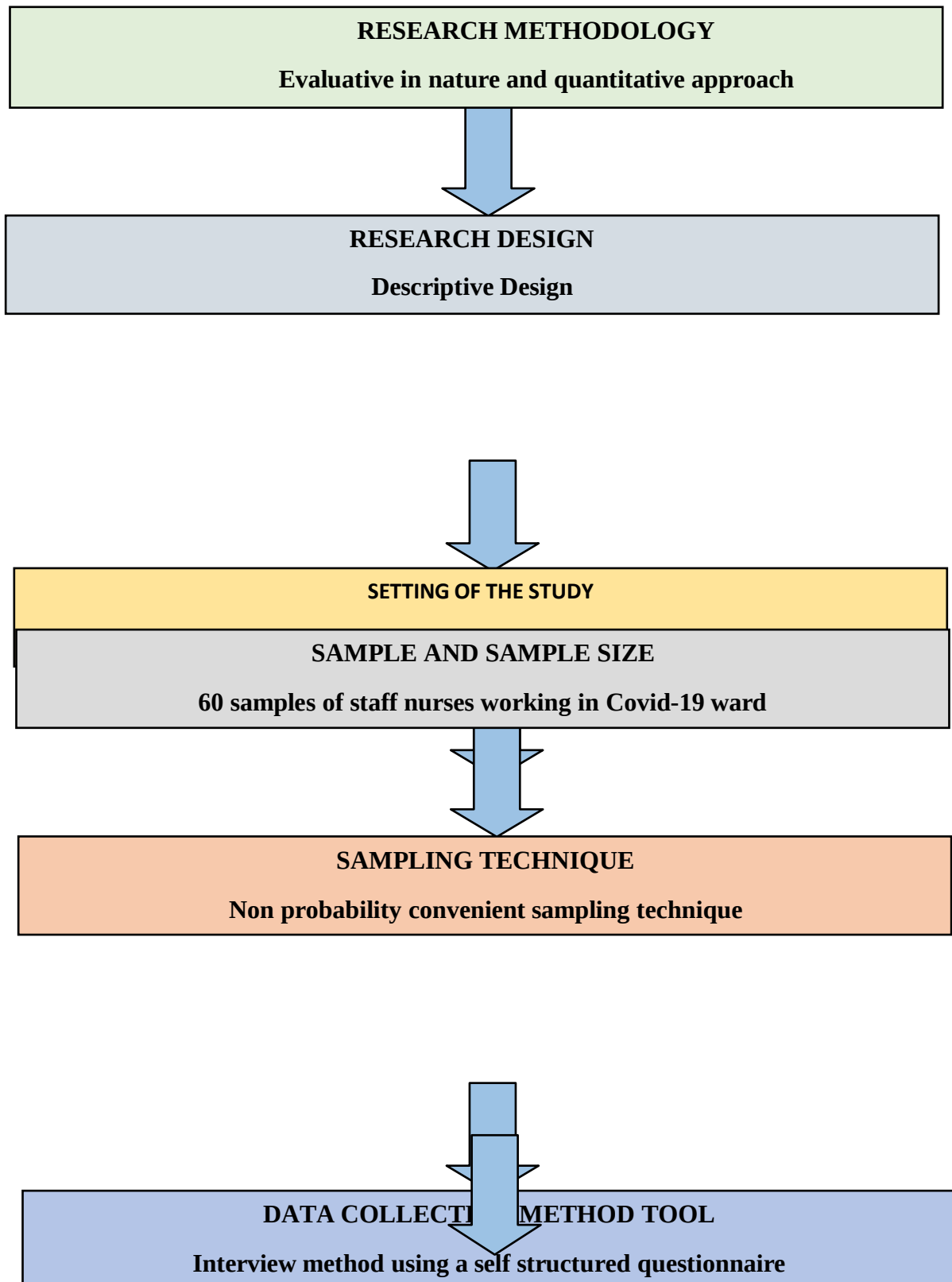
The study sample was selected by the following inclusion and exclusion criteria

INCLUSION CRITERIA:

- Nurses, who are working in Covid-19 ward.
- Nurses who are willing to participate in the study.
- Nurses who are working in any of the shifts in all covid-19 ward.

EXCLUSION CRITERIA:

- Nurses who are not involved in the care of covid-19 patients.
- Nurses are not available at the time of data collection.



DATA ANALYSIS AND INTERPRETATION

Descriptive and inferential statistics

Figure2. Schematic Representation of Research Methodology

Description of the tool

The tool consist staff nurses demographic data and stress related questionnaire.

Section A: Demographic variables

It consist demographic variables such as Age, Gender, marital status, income and years of experience.

Section B: Self structured questionnaire

It consist self-structured questionnaire based on difficulties faced while working covid-19 pandemic, challenges face while working with covid-19 patients, problems face while wearing personal protective equipment.

SCORE INTERPRETATION;

TOTAL SCORE: 100

- Severe stress : <50
- Moderate stress: 51 to 75
- Mild stress: >75

Content Validity

Data collection tool was evaluated by experts from the field of mental Health Nursing for content validity. Suggestions were considered and appropriate changes were done and to made the tool to be valid.

Plan for data analysis

The data analysis was done according to the objectives of study. Both descriptive and inferential statistics were used.

Descriptive statistics

Frequency, percentage were used for analysis chi square test assessment.

Inferential Statistics

Chi square was used to determine the association between selected variables.

Ethical clearance

The proposed study was conducted after the approval of dissertation Committee of the college, chief of the hospital also after the consent from the study participants without violating the human rights.

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

The data deals with the description of the sample, analysis and interpretation of data collected and the achievement of the objectives of the study, analysis of the data is a process by which quantitative information is summarized, organized, evaluated, interpreted and communicated in meaning full way. Analysis is the categorizing, ordering, manipulating and summarizing the data to obtain answer to research question. The purpose of analyzing is to reduce data to intelligible and interpretable form so that the relation of research problem can be studied and tested. This chapter deals with the analysis and interpretation of the data collected from 60 sample of level of stress among staff nurses in selected hospital Chennai.

SECTION – I:

Frequency and percentage distribution of the samples based on their demographic variables.

SECTION – II:

Frequency and percentage distribution of the stress among staff nurses.

SECTION – III:

Overall frequency and percentage distribution of the samples based on the level of stress among staff nurses.

SECTION – IV:

Association of overall level of stress among staff nurses during covid-19 pandemic.

SECTION-I

**TABLE-1: FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE SAMPLES
BASED ON THEIR DEMOGRAPHIC VARIABLES**

Table-1: Frequency and percentage distribution of the samples based on the demographic variables such as age, gender, marital status and years of experience.

S. NO	DEMOGRAPHIC VARIABLES	FREQUENCY(f)	PERCENTAGE (%)
1.	Age (in years)		
	a) 23-30	23	38.3%
	b) 31-40	19	31.7 %
	c) 41-50	17	28.3%
2.	Gender		
	a) Male	23	38.3%
	b) Female	37	61.7%
3.	Marital status		
	a) Married	21	35%
	b) Unmarried	21	35 %
	c) Widowed	14	23.3 %
	d) Separated	4	6.7 %
4.	Income		
	a) ₹5000-10000	10	16.7%
	b) ₹10001-20000	16	26.7%
	c) ₹20,001-30,000	20	33.3%
	d) ₹31,000-40,000	6	10%
	e) Above ₹400001	8	13.3%
5.	Years of experience do you have in clinical side		
	a) Less than 3 years	8	13.3%
	b) 4-6 years	21	35%
	c) 7-9 years	13	21.7%
	d) 10-12 years	6	10%
	e) More than 12 years	12	20%

Table 1.1: Shows that majority 23 (38.3 %) were belongs to the age between 23-30 years, 19 (31. 7%) of them between 31-40 years, 17 (28.3 %) of them are between 41-50 years.

Table 1.2: Shows majority of 37 (61.7 %) were belongs to females, 23(38.3 %) were belongs to males.

Table 1.3: Shows majority 21 (35%) were belongs to married, 21 (35%)were belongs to Unmarried, 14(23.3 %) were belongs to widowed, 4(6.7 %) were belongs to separated.

Table 1.4: Shows majority 20(33.3%) were earning between ₹20,001-30,000, 16(26.7%) were earning between ₹10001-20000, 10(16.7 %) were earn between ₹5000-10000, 8(13.3 %) were earn to more than ₹400001, 6(10%) were earn between ₹31,000-40,000.

Table 1.5: Shows majority 21 (35%) were belongs to nurses having 4-6 years experience, 13 (21.7 %) were belong nurses having 7-9years experience, 12 (20%) were belongs to nurses having more than 12 years experience, 8 (13.3 %) were belongs to nurses having less than 3 years experience and 6 (10%) of them having 10-12 years experience.

FIGURE 3.1 DISTRIBUTION OF AGE

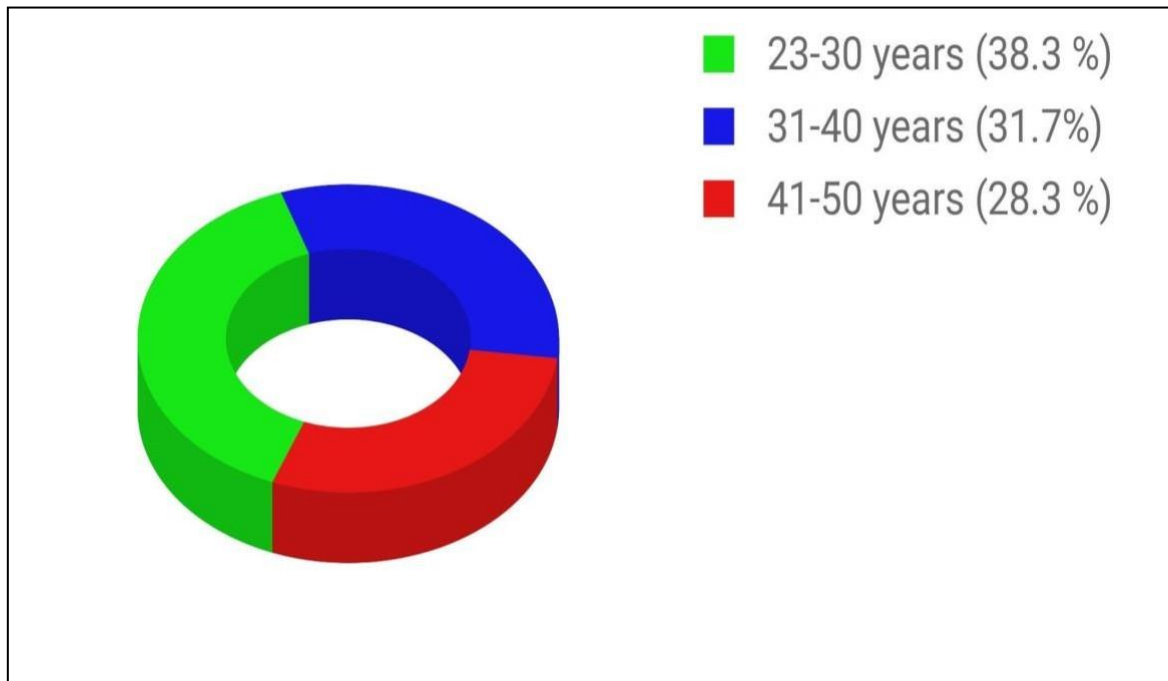


Figure 3.1 Shows that majority 23 (38.3 %) were belongs to the age between 23-30 years, 19 (31. 7%) of them between 31-40 years, 17 (28.3 %) of them are between 41-50 years.

FIGURE 3.2 DISTRIBUTION OF GENDER

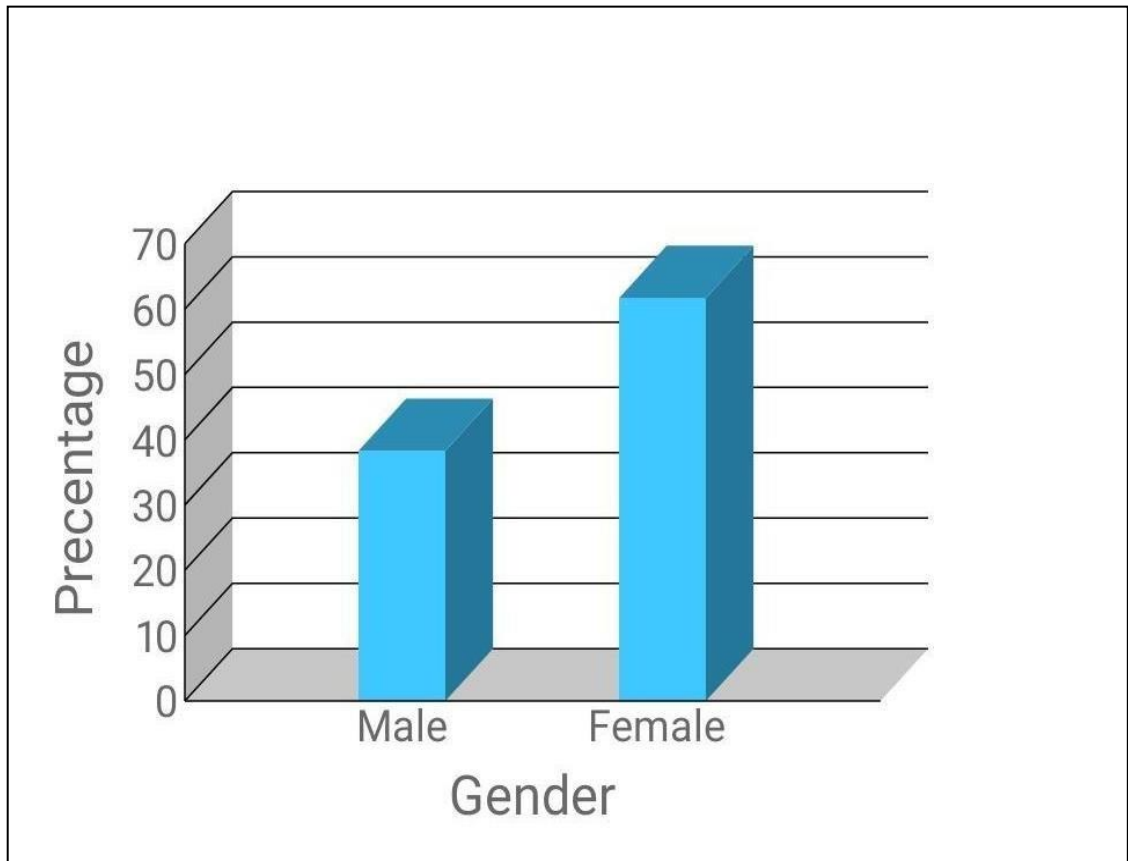


Figure 3.2 Shows majority of 37 (61.7 %) were belongs to females, 23(38.3 %) were belongs to males.

FIGURE 3.3 DISTRIBUTION OF MARITAL STATUS

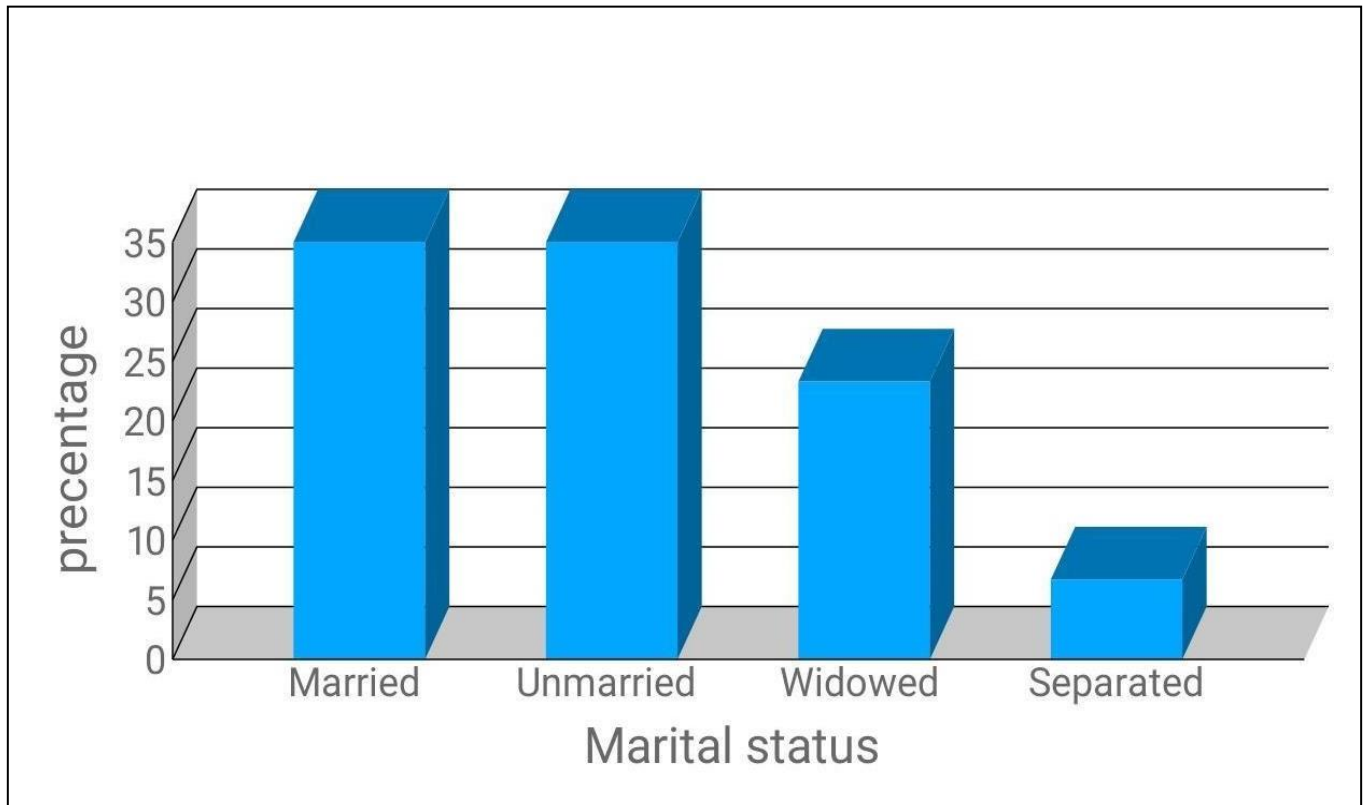


Figure 3.3 Shows majority 21 (35%) were belongs to married, 21 (35%)were belongs to Unmarried, 14(23.3 %) were belongs to widowed, 4(6.7 %) were belongs to separated.

FIGURE 3.4 DISTRIBUTION OF INCOME STATUS

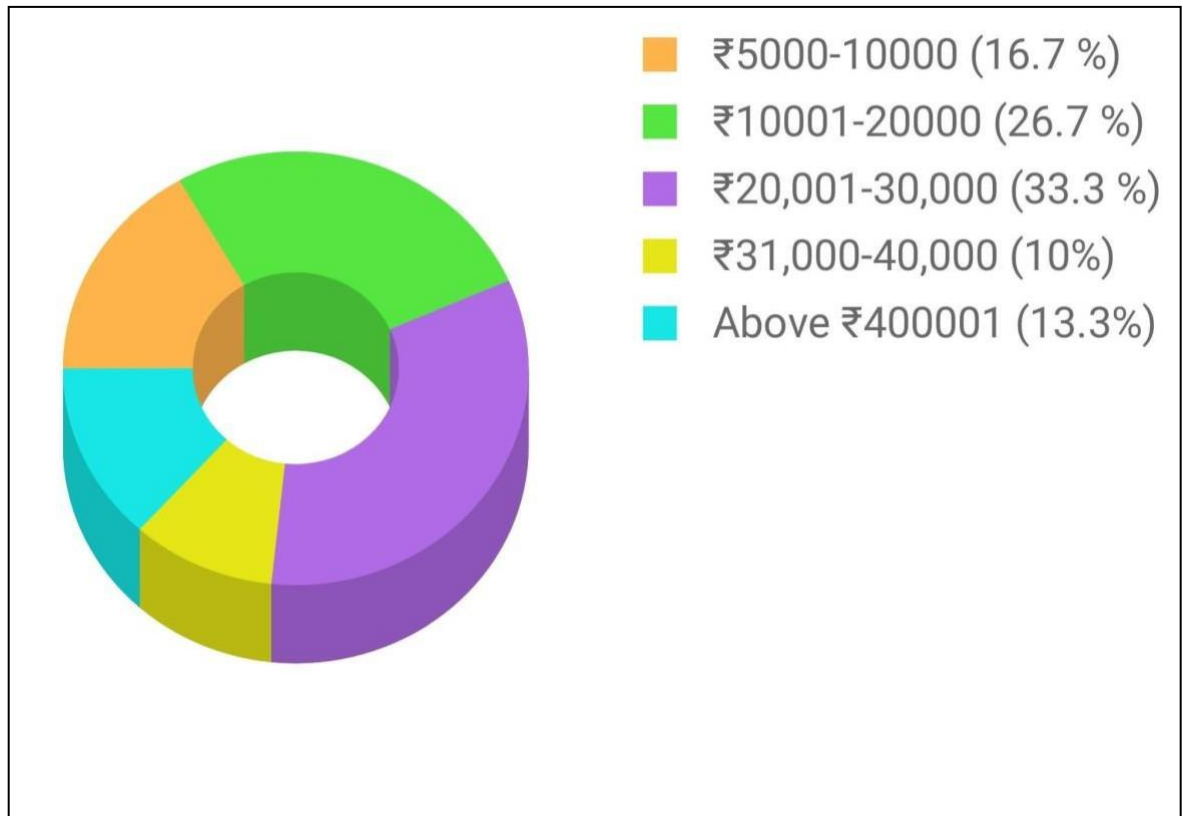


Figure 3.4 Shows majority 20(33.3%) were earning between ₹20,001-30,000, 16 (26.7 %) were earning between ₹10001-20000, 10(16.7 %) were earn between ₹5000-10000, 8(13.3 %) were earn to more than ₹400001, 6(10%) were earn between ₹31,000-40,000.

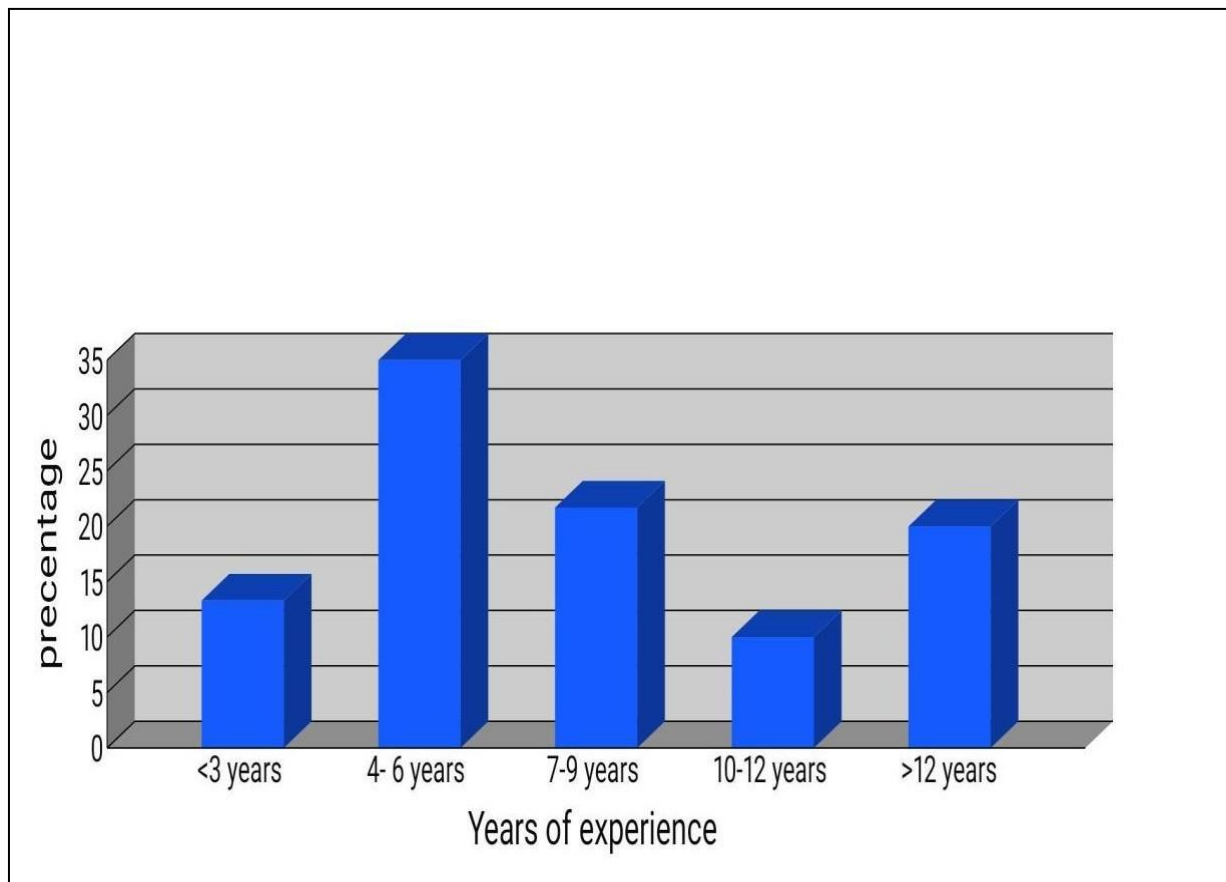
FIGURE 3.5 DISTRIBUTION OF YEARS OF EXPERIENCE

Figure 3.5 Shows majority 21 (35%) were belongs to nurses having 4-6 years experience, 13 (21.7 %) were belong nurses having 7-9 years experience, 12 (20%) were belongs to nurses having more than 12 years experience, 8 (13.3 %) were belongs to nurses having less than 3 years experience and 6 (10%) of them having 10-12 years experience.

TABLE 2: FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE STRESS AMONG STAFF NURSES

Table 2.1: Frequency and percentage distribution of stress among staff nurses of the samples based on difficulties faced while working covid-19 pandemic such as slept badly & rest lessly, hard to go to sleep, woken up too early and not been able to get back to sleep, woken up several times and found it difficult to get back, unable to balance work & family, lack of transport facilities.

S. No	DID YOU EXPERIENCE ANY OF THE FOLLOWING	FREQUENCY (f)	PERCENTAGE (%)
1.	Slept badly and rest lessly		
	a) Strongly agree	18	30%
	b) Agree	17	28.3 %
	c) Neutral	15	25%
	d) Disagree	8	13.3 %
	e) Strongly disagree	2	3.3 %
2.	Hard to go to sleep		
	a) Strongly agree	17	28.3 %
	b) Agree	11	18.3 %
	c) Neutral	16	26.7%
	d) Disagree	12	20%
	e) Strongly disagree	4	6.7 %
3	Woken up too early and not been able to get back to sleep		
	a) Strongly agree	21	35%
	b) Agree	17	28.3 %
	c) Neutral	12	20%
	d) Disagree	5	8.3%
	e) Strongly disagree	5	8.3%
4.	Woken up several times and found it difficult to get back		
	a) Strongly agree	18	30%
	b) Agree	16	26.7%
	c) Neutral	10	16.7 %
	d) Disagree	11	18.3 %
	e) Strongly disagree	5	8.3%
5.	Unable to balance work and family		
	a) Strongly agree	17	28.3 %
	b) Agree	8	13.3%
	c) Neutral	14	23.3 %
	d) Disagree	12	20%

6.	e) Strongly disagree	9	15%
	Lack of transport facilities		
	a) Strongly agree	17	28.3 %
	b) Agree	12	20%
	c) Neutral	13	21.7 %
	d) Disagree	15	25%
	e) Strongly disagree	3	5%

Table 2.1.1: shows that majority 16(26.7 %) of the samples were experienced of slept badly and rest lessly.

Table 2.1.2: shows that majority 15(25%) of the samples were experienced hard to go to sleep.

Table 2.1. 3: Shows that majority 19(31.7%) of the samples were experienced woken up too early and not been able to get back to sleep.

Table 2.1.4: Shows that majority 15(25%) of the samples were experienced woken up several times and found it difficult to get back.

Table 2.1.5: Shows that majority 17(28.3 %) of the samples were experienced unable to balance work and family.

Table 2.1.6: shows that majority 17(28.3 %) of the samples were experienced lack of transport facilities.

Table 2.2: Frequency and percentage distribution of stress among staff nurses of the samples based on challenges face while working with covid-19 patients such as lack of medicines, lack of beds, lack of oxygen cylinders, patient with severe covid-19, patient not cooperate, lack of personal protective equipment, unable to spend time with family members & friends, people were afraid to get covid-19 tested.

S. NO	CHALLENGES FACED WHILE WORKING WITH COVID 19 PATIENTS	FREQUENCY (f)	PERCENTAGE (%)
7.	Lack of medicine		
	a) Strongly agree	17	28.3 %
	b) Agree	13	21.7 %
	c) Neutral	11	18.3 %
	d) Disagree	9	15%
	e) Strongly disagree	10	16.7 %
8.	Lack of beds		
	a) Strongly agree	16	26.7 %
	b) Agree	15	25%
	c) Neutral	10	16.7 %
	d) Disagree	9	15%
	e) Strongly disagree	10	16.7 %
9.	Lack of oxygen cylinders		
	a) Strongly agree	15	25%
	b) Agree	13	21.7%
	c) Neutral	14	23.3%
	d) Disagree	13	21.7 %
	e) Strongly disagree	5	8.3 %
10	Patient with severe covid-19		
	a) Strongly agree	16	26.7 %
	b) Agree	12	20%
	c) Neutral	10	16.7 %
	d) Disagree	13	21.7 %
	e) Strongly disagree	9	15%
11.	Patient not cooperate		
	a) Strongly agree	18	30%
	b) Agree	11	18.3 %
	c) Neutral	11	18.3 %
	d) Disagree	10	16.7 %

	d) Strongly disagree	10	16.7 %
12.	Lack of personal protective equipment		
	a) Strongly agree	19	31.7 %
	b) Agree	16	26.7%
	c) Neutral	12	20%
	d) Disagree	7	11.7%
	e) Strongly disagree	6	10%
13.	Unable to meet family members & friends		
	a) Strongly agree	19	31.7 %
	b) Agree	15	25%
	c) Neutral	12	20%
	d) Disagree	3	5 %
	e) Strongly disagree	11	18.3 %
14.	People were afraid to get covid-19 tested		
	a) Strongly agree	14	23.3 %
	b) Agree	12	20%
	c) Neutral	13	21.7 %
	d) Disagree	11	18.3%
	e) Strongly disagree	10	16.7%

Table 2.2.7: Show that majority 15(25%) of the samples were faced lack of medicines

Table 2.2.8: Show that majority 15(25%) of the samples were faced lack of beds

Table 2.2.9: Show that majority 15(25%) of the samples were faced lack of cylinders.

Table 2.2.10: Show that majority 16(26.7 %) of the samples were faced patients with severe covid-19.

Table 2.2.11: Show that majority 17(28.3 %) of the samples were faced patient not cooperate.

Table 2.2.12: Show that majority 18(30%) of the samples were faced lack of personal protective equipment.

Table 2.2.13: Show that majority 17(28.3 %)of the samples were faced unable to meet family members and friends.

Table 2.2.14: Show that majority 13(21.7 %) of the samples were faced people afraid to get covid-19 tested.

Table 2.3: Frequency and percentage distribution of stress among staff nurses based on problems face while wearing personal protective equipment such as couldn't eat food & drink water, skin allergies, unable to urinate, sweating, Couldn't talk to anyone, unable to meet family members.

S.NO	CHALLENGES FACED WHILE WORKING WITH COVID 19 PATIENTS	FREQUENCY (f)	PERCENTAGE (%)
15	Couldn't eat food and drink water		
	f) Strongly agree	18	30%
	g) Agree	16	26.7 %
	h) Neutral	13	21.7 %
	i) Disagree	11	18.3 %
	j) Strongly disagree	2	3.3%
16	Skin allergies		
	f) Strongly agree	17	28.3%
	g) Agree	13	21.7%
	h) Neutral	13	21.7 %
	i) Disagree	11	18.3 %
	j) Strongly disagree	6	3.3%
17	Unable to urinate		
	f) Strongly agree	17	28.3 %
	g) Agree	12	20 %
	h) Neutral	12	20 %
	i) Disagree	10	16.7 %
	j) Strongly disagree	9	15%
18	Sweating		
	f) Strongly agree	17	28.3 %
	g) Agree	15	25 %
	h) Neutral	6	10 %
	i) Disagree	15	25%
	j) Strongly disagree	7	11.7 %
19	Unable to talk to anyone		
	e) Strongly agree	19	31.7 %
	f) Agree	12	20%

	g) Neutral	11	18.3%
	d) Disagree	14	23.3 %
	h) Strongly disagree	4	6.7 %
20.	Unable to meet family members		
	f) Strongly agree	16	26.7 %
	g) Agree	14	23.3 %
	h) Neutral	11	18.3 %
	i) Disagree	11	18.3%
	j) Strongly disagree	8	13.3 %

Table 2.3.15: Shows that majority 15 (25 %) of the samples were faced problems of couldn't eat food and drink water.

Table 2.3.16: Shows that majority 15(25 %) of the samples were faced problems of skin allergies.

Table 2.3.17: Shows that majority 15 (25%) of the samples were faced problems of unable to urinate.

Table 2.3.18: Shows that majority 18 (30%) of the samples were faced problems of sweating.

Table 2.3.19: Shows that majority 18(30 %) of the samples were faced problems of unable to talk anyone.

Table 2.3.20: Shows that majority 14(23.3%) of the samples were faced problems of unable to meet family members.

SECTION -1II

Table 3: OVERALL FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE SAMPLES BASED ON THE LEVEL OF STRESS AMONG STAFF NURSES DURING COVID-19 PANDEMIC

n= 60

S. NO	LEVEL OF STRESS	FREQUENCY (f)	PERCENTAGE (%)
1.	Severe stress	21	35%
2.	Moderate stress	30	50 %
3.	Mild stress	9	15 %

Table-3: Shows that 50% of the samples had moderate stress, 35% of the sample had severe stress and 15% had mild stress on the level of stress among staff nurses during covid-19 pandemic.

FIGURE 4: FREQUENCY AND DISTRIBUTION OVERALL STRESS AMONG STAFF NURSES DURING COVID-19 PANDEMIC

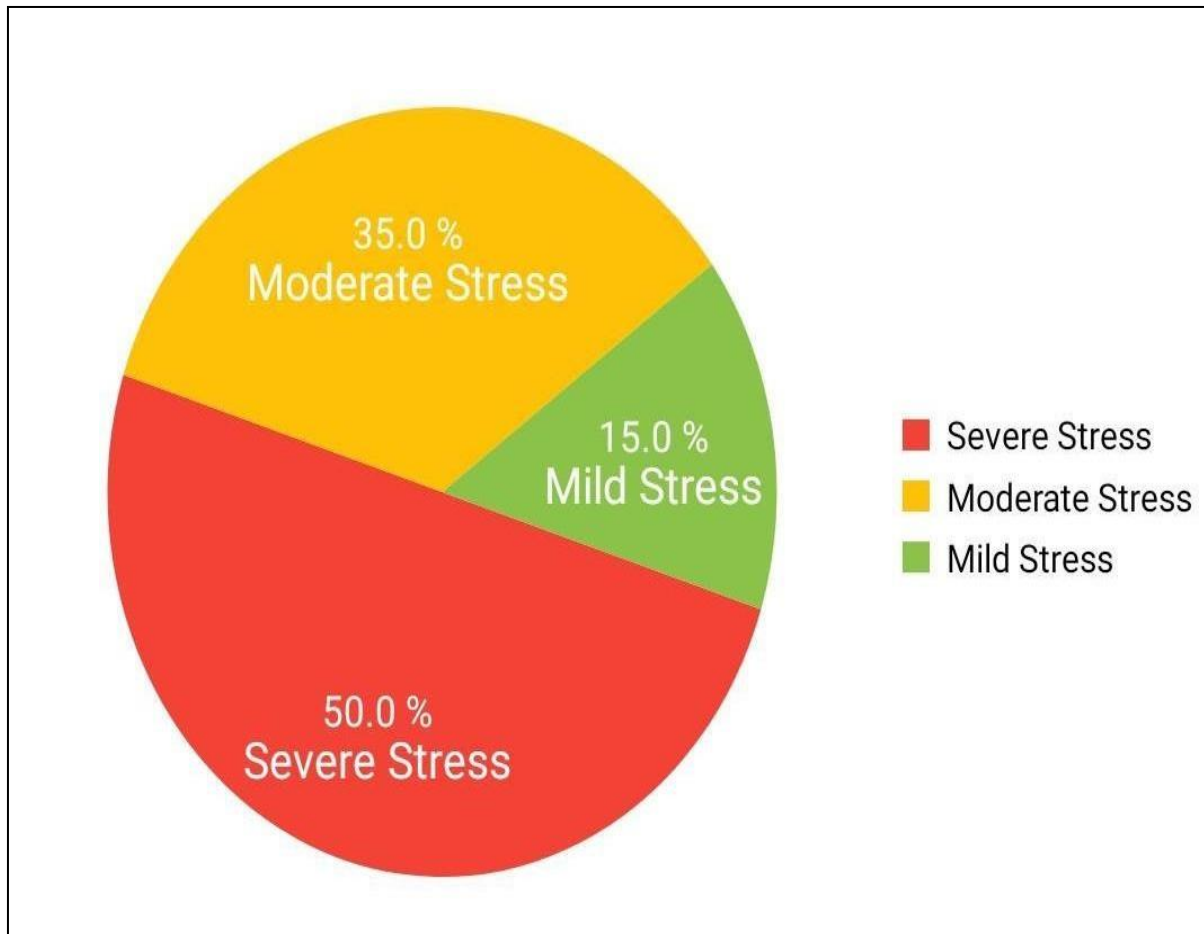


Figure4: Shows that majority 30 (50%) were belongs to moderate stress, 21(35%) of them severe stress and 9 (15%) of them mild stress.

SECTION IV

Association between the level of stress among staff nurses with their selected demographic variables

Table -4 Association between the level of stress among staff nurses with their selected demographic variables.

n= 60

S. No	Demographic Variables	Level of stress			χ^2	Table Value	Level of significance
		Severe Stress	Moderate Stress	Mild stress			
1.	Age (in years)						
	a. 23-30	6	12	5	10.01	9.49	(S)
	b. 31-40	8	11	1			
	c. 41-50	7	7	3			
2.	Gender						
	a) Male	3	14	6	2.89	5.99	(NS)
	b) Females	12	16	9			
3.	Marital status						
	a) Married	6	11	4	12.89	12.59	(S)
	b) Unmarried	4	9	8			
	c) Widowed	2	9	3			
	d) Separated	3	1	0			
4.	Income(in rupees)						
	a) 5000-10000	2	4	4			(NS)
	b) 10001-20000	2	11	3			

	c) 20001-30000	5	9	6	8.8	15.51	
	d) 30001-40000	1	4	1	6		
	e) >400001	5	2	1			
5.	Years of experience						
	a) < 3 years	1	4	3	6.7	13.36	
	b) 4-6 years	5	12	4	3		
	c) 7-9 years	3	6	4			
	d) 10-12 years	1	4	1			
	e) >12 years	5	4	3			(NS)

Table 4: Shows that there is significant association of level of stress among staff nurses with demographic variables such as age and marital status. But there is no significant association between level of stress among staff nurses with demographic variables such age, gender, income status and years of experience.

CHAPTER- V

DISCUSSION

This chapter discusses the findings of the study derived from statistical analysis and its pertinence to the objectives set for the study and related literature of the study.

OBJECTIVES OF THE STUDY:

- ❖ To assess the level of stress among staff nurses.
- ❖ To associate the level of stress among staff nurses with demographic variables.
- ❖ To create awareness on stress adaptive behavior among staff nurses.

Distribution of demographic variables of stress among staff nurses during covid-19 pandemic at selected hospital.

The study finding revealed that the

- ❖ **Age of staff nurses (years)** in which majority 23 (38.3 %) were belongs to the age between 23-30 years, 19 (31.7 %) of them between 31-40 years, 17 (28.3 %) of them are between 41-50 years.
- ❖ **Gender** in which majority of 37 (61.7 %) were belongs to females, 23(38.3 %) were belongs to males.
- ❖ **Marital status of staff nurses** in which shows majority 21 (35%) were belongs to married, 21 (35%) were belongs to unmarried, 14(23.3 %) were belongs to widowed, 4(6.7 %) were belongs to separated.
- ❖ **Income status of staff nurses** in which majority 20 (33.3%) were earning between ₹20,001-30,000, 16 (26.7 %) were earning between ₹10001-20000, 10(16.7 %) were earn between ₹5000-10000, 8(13.3 %) were earn to more than ₹400001, 6(10%) were earn between ₹31,000-40,000.
- ❖ **Years of experience** in which majority 21 (35%) were belongs to nurses having 4-6 years experience, 13 (21.7 %) were belong nurses having 7-9 years experience, 12 (20%) were belongs to nurses having more than 12 years experience, 8 (13.3 %) were belongs to nurses having less than 3 years experience and 6 (10%) of them having 10-12 years experience.

Distribution of association of level of stress among staff nurses

- ❖ The frequency distribution in the study shows that majority 25 (50%) were belongs to moderate stress, 21(35%) of them severe stress and 9 (15%) of them Inadequate knowledge childhood obesity.
- ❖ The frequency distribution in the study shows that there is significant association of level of stress among staff nurses with demographic variables such as age and marital status. But there is no significant Association between level of stress among staff nurses with demographic variables such as gender, income status and years of experience.

THE DISCUSSION BASED ON THE OBJECTIVES SPECIFIED IN THE STUDY

➤ **Objective1: To assess the level of stress among staff nurses during covid-19 pandemic at selected settings in Chennai.** The findings revealed 50 % of the sample had moderate stress, 35% of samples had severe stress and 15% of samples had mild stress.

The result was supported by a study conducted **Sheryl Cornelio, Saly Suseel, Valsa Thomas (2021)**, conducted a study on Covid-19 related depression, anxiety and stress among nurses. The research has done quantitative research approach was used with descriptive design. Samples selected were nurses working in Covid-19 ICU, wards and covid-19 Clinic. Non probability convenience sampling was used to select the samples with sample size being 83. Data collection was done between october 15th to 30th 2020. Analysis of the data showed that the nurses working in Covid-19 department had moderate stress (34%), majority of them did not have any symptoms of depression, and majority of them had moderate stress level (48%). The study highlighted that Nurses who are an integral part of the COVID-19 pandemic undergo varied levels of stressors and anxiety which are attributed to various reasons. Sources of distress may include feelings self-health, deadly pandemic, health of family members and friends, changes in work-style and isolation.

➤ **Objective 2: To associate the level of stress with demographic variables.** The findings revealed that there was no statistically significant association between stress during covid-19 pandemic with demographic variables such as age, gender, marital status, income and years of experience and self-structured questionnaire.

The findings of this study were supported by the following study by, has done cross-sectional study conducted in five Isolation governmental hospitals for COVID-19. 374 nurses included at the study. Characteristic forms, factors affecting nurses' stress and Nursing Stress

Scale (NSS) were used to collect data. (52.1%) of studied nurses had moderate level of total nursing stress scale, (26.2%) of them had severe level, (13.4% & 8.3%) of them had mild stress. Training for COVID-19, availability of PPE, educational level and attention of hospital administration were negative predictor factors for nurses' stress, while having children, people showed that COVID-19 is stigma fears of infection, workplace, fear of transmission infection for family and nurse to patient ratio were positive predictors.

- **Objective 3:** To creating awareness will improve stress adaptive behavior.

CHAPTER VI

SUMMARY, CONCLUSION, IMPLEMENTATION AND RECOMMENDATIONS

OBJECTIVES OF THE STUDY WERE TO

- ❖ To assess the level of stress among staff nurses.
- ❖ To associate the level of stress among staff nurses with demographic variables.
- ❖ To create awareness on stress adaptive behavior among staff nurses.

RESEARCH DESIGN:

- ❖ Descriptive study design was used to conduct the study on data obtained on level of stress.
- ❖ Sample of 60 staff nurses in selected school in Chennai district, who met the Inclusion criteria were selected for the study by using purposive sampling method. Instruments used for data collection were self-structured interview to determine level of stress among staff nurses in selected school in Chennai. The investigator planned to collect the data for the period of one week. Prior written permission and consent were obtained from the H.O.D. Chi-square test was used to find out the association the level of stress among staff nurses with selected demographic variables.
- ❖ Chi-square test was used to find out the association of level of stress among staff nurses with selected demographic variables.

TO ASSESS THE LEVEL OF STRESS AMONG STAFF NURSES:

The frequency distribution in the study shows that majority 30 (50%) were belongs to moderate stress, 21(35%) of them severe stress and 9 (15%) of them mild stress.

TO ASSOCIATE THE LEVEL OF STRESS AMONG STAFF NURSES WITH SELECTED DEMOGRAPHIC VARIABLE:

The frequency distribution in the shows that there is significant association of level of stress among staff nurses with demographic variables such as age and marital status. But there is no significant association between level of stress among staff nurses with demographic variables such as gender, income status and years of experience.

SUMMARY

The research project was done to assess the level of stress among staff nurses during covid-19 in selected settings Chennai. The objective of the study was to assess the level of stress among staff nurses and samples were selected by using a non probability sampling technique. The tool used was a self-reporting structured questionnaire. The time duration for the period of collection was 1 week. The collected data was analyzed and interpretation was done using statistical tabulation with appropriate percentages.

By taking this project, the investigator was able to do the data collection analysis and interpretation for the study and assess the overall level of stress among staff nurses in selected hospitals at Chennai.

CONCLUSION

Nursing is described as a stressful-profession and nurses are exposed to a great number of stressors in their working environment. According to the Occupational Health and Safety Survey of the American Nurses Association (ANA), the main concern for the nursing staff with regard to health and safety in the work environment is the acute or chronic effect of stress. The work conditions in nursing imply the exposure to pain and death, interpersonal conflicts, lack of autonomy and authority for decision making and the lack of definition of the professional role, which produce a state of chronic stress.

The study was conducted to assess the level of stress among staff nurses during covid-19 at selected hospital Chennai.

The findings of the research project revealed that

- ❖ **Age of staff nurses (years)** in which majority 23 (38.3 %) were belongs to the age between 23-30 years, 19 (31.7%) of them between 31-40 years, 17 (28.3 %) of them are between 41-50 years.
- ❖ **Gender** in which majority of 37 (61.7 %) were belongs to females, 23(38.3 %) were belongs to males.
- ❖ **Marital status** of staff nurses in which shows majority 21 (35%) were belongs to married, 21 (35%) were belongs to unmarried, 14(23.3 %) were belongs to widowed, 4(6.7 %) were belongs to separated.
- ❖ **Income status** of staff nurses in which majority 20 (33.3%) were earning between ₹20,001-30,000, 16 (26.7 %) were earning between ₹10001-20000, 10(16.7 %) were earn between ₹5000-10000, 8(13.3 %) were earn to more than ₹400001, 6(10%) were earn between ₹31,000-40,000.
- ❖ **Years of experience** in which majority 21 (35%) were belongs to nurses having 4-6 years experience, 13 (21.7 %) were belong nurses having 7-9 years experience, 12 (20%) were belongs to nurses having more than 12 years experience, 8 (13.3 %) were belongs to nurses having less than 3 years experience and 6 (10%) of them having 10-12 years experience.

NURSING IMPLICATIONS

- ❖ Implications was done and drawn for nursing practice, nursing administration, nursing education and nursing research.

NURSING PRACTICE

- The nurse should apply her knowledge on psychiatry to prevent mental illness and to help promote and maintain mental health.
- This includes providing health education on the types of stress, causes of stress, signs and symptoms of stress and stress adaptive behavior. Stress is considered important, because such can affect the mental health.

NURSING ADMINISTRATION

- Nursing administration can plan and organize stress related programs among the nurses in hospitals.
- Nursing administration can frame a policy on the importance of stress adaptive behavior among staff nurses and their mental health at all healthcare setting levels.

NURSING EDUCATOR

- The nursing educator can motivate and educate the nurses about the importance of stress adaptive behavior.
- The nursing educator should motivate the nurses and prepare informative health education models in relation to stress adaptive behavior.

NURSING RESEARCH

- The study will motivate new researcher to conduct the same study with the different variable on large scale.
- The nurse researcher can help in developing new strategies and import Knowledge among staff nurses regarding stress adaptive behavior.
- The findings of the study can be disseminated through a conference, seminar or

be published in a journal.

LIMITATIONS:

- Sample size was 60.
- Setting was selected hospital at Chennai, Tamil Nadu.

RECOMMENDATIONS

- Based on the present study in view, the following recommendations were made:
- The research study can be conducted among a larger sampling group to help validate and generalize the findings.
- The research study can be conducted to assess the level of stress among staff nurses during covid-19 pandemic of various hospitals.

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APPENDIX-I

PARTICIPANT INFORMATION SHEET (PIS)

The title of the research project is **Assess the level of stress among staff nurses during covid-19 pandemic at selected hospital Chennai, Tamil Nadu, India**. The objectives are to assess the level of stress among staff nurses, to associate the level of stress among staff nurses with demographic variables, to create awareness on stress adaptive behavior among staff. Non probability quantitative approach with a descriptive design will be used. The information from the participant will be collected through self structured interview schedule on demographic variables perform and level of stress among staff nurses. Data will have collected from the participant is approximately 30 minutes. The study benefits are this research will provide the baseline data, which enables the future researchers to conduct evidence based research and help to create awareness stress adaptive behavior. The study is free from risk / injury. Complete

freedom for the participant to withdraw from the research participation at any point of time without the loss of treatment benefits.

APPENDIX-II

LETTER SEEKING EXPERT OPINION AND CONTENT VALIDITY

From

Ms. Anushiya Shaki S and Aravindh S,
B.Sc. Nursing, III year,
Sathyabama College of Nursing,
Chennai -119.

To

The director,
Chennai.

Respected Madam / Sir,

Sub: Requisition for expert opinion and content validity regarding.

We are B.Sc.(Nursing) III year student of Sathyabama College of Nursing, Chennai ,under Sathyabama Institute of Science and Technology (deemed to be university) . As a partial fulfillment of our B.Sc. (Nursing) degree program, We are conducting a research study on “Assess the level of stress among staff nurses during covid-19 pandemic at selected hospitals, Chennai”. I am sending the tool for content validity and for your expert & valuable opinion. I will be very thankful if you return it at the earliest. Here with I have enclosed the necessary documents.

Thanking You

Place:

Yours faithfully,

Date:

Ms. Anushiya Shaki S,

Mr. Aravindh S.

APPENDIX-III

CERTIFICATE OF CONTENT VALIDITY

To Whom So Ever It May Concern

This is to certify that the tool prepared by Ms. Anushiya Shaki S and Mr. Aravindh S, B.Sc. (N) III year students of Sathyabama College of Nursing, Sathyabama Institute of Science and Technology (deemed to be university) for the conduction of the research study on “Assess the level of stress among staff nurses during covid-19 pandemic at selected hospitals, Chennai” is valid. They can proceed in conducting data collection.

APPENDIX-IV
RESEARCH CONSENT FORM

Dear Participants,

We are Ms. Anushiya Shaki S and Mr. Aravindh S, B.Sc. Nursing III year student of Sathyabama College of Nursing, Sathyabama Institute of Science and Technology, Chennai. As a part of our study, a research on “Assess the level of stress among staff nurses during covid-19 pandemic at selected hospitals, Chennai” is to be conducted. The study will be helpful in reducing stress.

I hereby seek your consent and co- operation to participate in the study. Please be frank and honest in your responses. The information collection will be kept confidential and anonymity will be maintained.

Thank You

I _____ here by consent to participate and undergo the study.

Date:

Signature of the researcher

Place:

Signature of the participant

APPENDIX-V

RESEARCH TOOL

SECTION-A

DEMOGRAPHIC DATA

Kindly read the following questions and place a tick mark in the appropriate response.

1. AGE:

- | | |
|------------------|-----|
| (a) 23-30 years | () |
| (b) 31-40 years. | () |
| (c) 41-50 years | () |

2. GENDER:

- (a) Male ☐
- (b) Female ☐

3. MARITAL STATUS:

- (a) Married. ☐
- (b) Unmarried ☐
- (c) Widowed. ☐
- (d) Separated ☐

4. INCOME:

- (a) ₹ 5000-10000 ☐
- (b) ₹10001-20000. ☐
- (c) ₹ 20,001-30,000. ☐
- (d) ₹ 31,000-40,000. ☐
- (e) Above ₹ 400001 ☐

5. HOW MANY YEARS OF EXPERIENCE DO YOU HAVE IN CLINICAL SIDE

- (a) Less than 3 years. ☐
- (b) 4-6 years. ☐
- (c) 7-9 years. ☐
- (d) 10-12 years. ☐
- (e) Above 12 years ☐

பகுதி- அ

தயவுசெய்து பின்வரும் கேள்விளைப்
படித்து, சபார்த்தமான பதிலை குறிக்கவும்

1.வயது

- அ) 23-30 வயது ☐
- ஆ) 31-40 வயது ☐
- இ) 41-50 வயது ☐
- ()

2. பாலினம்

- அ) ஆண் ☐

ஆ) சபண் ()

3.திருமண நிளை

அ) திரும்மணமனவர் ()

ஆ) திரும்மணமனோதவர்

இ) விதளவ .()

ஈ) தனியனேவழ்பவரர். ()

4. வரம்மன நிளவை:

அ) ₹ 5000-10000 ()

ஆ) ₹ 10001-20000 ()

இ) ₹ 20,001-30,000. ()

ஈ) ₹ 31,000-40,000. ()

உ) ₹ 400001அல்ைதுஅதற்குகமல் ()

5.மருத்துவதுளறயில்உங்ேருக்குளத்தளனவருடஅனுபவம்உல்ைது

அ) 3 வருடங்ேளும்்குளறவ்ே ()

ஆ) 4-6 வருடங்ேள் ()

இ) 7-9 வருடங்ேள் ()

ஈ) 10 – 12 வருடங்ேள் ()

உ) 12 வருடங்ேருக்குகமல் ()

SECTION – B**Self structured questionnaire****Difficulties faced while working covid-19 pandemic**

1. Slept badly and rest lessly

- (a) Strongly agree ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree ()
- (e) Strongly disagree ()

2. Hard to go to sleep

- (a) Strongly agree ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree ()
- (e) Strongly disagree ()

3. Woken up too early and not been able to get back to sleep

- (a) Strongly agree ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree ()
- (e) Strongly disagree ()

4. Woken up several times and found it difficult to get back

- (a) Strongly agree ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree ()
- (e) Strongly disagree ()

5. Unable to balance work and family

- (a) Strongly agree ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree ()
- (e) Strongly disagree ()

6. Lack of transport facilities

- (a) Strongly agree ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree ()
- (e) Strongly disagree ()

7. Lack of medicines

- (a) Strongly agree ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree ()
- (e) Strongly disagree ()

8. Lack of beds

- (a) Strongly agree ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree ()
- (e) Strongly disagree ()

9. Lack of oxygen cylinders

- (a) Strongly agree ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree. ()
- (e) Strongly disagree ()

10. Patients with severe covid-19

- (a) Strongly ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree ()
- (e) Strongly disagree ()

11. Patients not cooperate

- (a) Strongly agree ()
- (b) Agree ()
- (c) Neutral ()
- (d) Disagree ()
- (e) Strongly disagree ()

12. Lack of personal protective equipment

- (a) Strongly agree ()

- (b) Agree ()
 - (c) Neutral ()
 - (d) Disagree ()
 - (e) Strongly disagree ()
13. Sacred about spreading the disease
- (a) Strongly agree ()
 - (b) Agree ()
 - (c) Neutral ()
 - (d) Disagree ()
 - (e) Strongly disagree ()
14. People were afraid to get covid-19 tested
- (a) Strongly agree ()
 - (b) Agree ()
 - (c) Neutral ()
 - (d) Disagree ()
 - (e) Strongly disagree ()

Problems face while wearing personal protective equipment

15. Couldn't eat food and drink water
- (a) Strongly agree ()
 - (b) Agree ()
 - (c) Neutral ()
 - (d) Disagree ()
 - (e) Strongly disagree ()
16. Skin allergies
- (a) Strongly agree ()
 - (b) Agree ()
 - (c) Neutral ()
 - (d) Disagree ()
 - (e) Strongly disagree ()
17. Unable to urinate
- (a) Strongly agree ()

(ஆ) ஒப்புக் சேர்வுகளே கிறன் ()

(இ) நடுநினை ()

(ஈ) உடன்படவில்லை. ()

(உ) உறுதியே உடன்படவில்லை. ()

2. தூங்கச் செல்வது டேயினமே இருந்தது

(அ) உறுதியே ()

ஒப்புக்சேர்வுகளே கிறன்

(ஆ) ஒப்புக்சேர்வுகளே கிறன் ()

(இ) நடுநினை ()

(ஈ) உடன்படவில்லை ()

(உ) உறுதியே ()

உடன்படவில்லை

3. டேயினம் எழுந்ததில் முடியவில்லை மீண்டும் தூங்கே

(அ) உறுதியே ()

ஒப்புக்சேர்வுகளே கிறன்

(ஆ) ஒப்புக்சேர்வுகளே கிறன் ()

(இ) நடுநினை ()

(ஈ) உடன்படவில்லை ()

(உ) உறுதியே ()

உடன்படவில்லை

4. பைமுளறேன் விழித்தும், தூக்கம் திரும்ப வருவதில் டேயினம் ஏற்பட்டது

(அ) உறுதியே ஒப்புக்சேர்வுகளே கிறன் ()

(ஆ) ஒப்புக்சேர்வுகளே கிறன் ()

(இ) நடுநினை ()

(ஈ) உடன்படவில்லை ()

(உ) உறுதியுடன் உடன்படவில்லை ()

5.கவனமளையும் குடும்பத்தையும் மீட்டிவைப்படுத்த

முடியவில்லை(அ) உறுதியுடன் ஒப்புக்கொள்ளுமே ()

(ஆ) ஒப்புக்கொள்ளுமே ()

(இ)நடுநிலை ()

(ஈ) உடன்படவில்லை ()

(உ) உறுதியுடன் உடன்படவில்லை ()

6.கபாக்காவரத்து வந்தியின்ம

(அ) உறுதியுடன் ஒப்புக்கொள்ளுமே ()

(ஆ) ஒப்புக்கொள்ளுமே ()

(இ) நடுநிலை ()

(ஈ) உடன்படவில்லை ()

(உ) உறுதியுடன் உடன்படவில்லை ()

கொவிட்-19 க)யொளிக்குடன் பணிபுரியும் கபாது எதிர்த்துண்ட சவால்

7. மருந்தைப் பற்றாக்குறை

(அ) உறுதியுடன் ஒப்புக்கொள்ளுமே ()

(ஆ) ஒப்புக்கொள்ளுமே ()

- (இ) நடுநிளை ()
- (ஈ) உடன்படவில்லை ()
- (உ) உறுதியுடைய உடன்படவில்லை ()

8.படங்களுள் பற்றாக்கூற

- (அ) உறுதியுடைய ஒப்புகச்சேர்த்துகறன் ()
- (ஆ) ஒப்புகச்சேர்த்துகறன் ()
- (இ) நடுநிளை ()
- (ஈ) உடன்படவில்லை ()
- (உ) உறுதியுடைய உடன்படவில்லை ()

9.ஆகஸிஜன் மின்னணுக்கள் பற்றாக்கூற

- (அ) உறுதியுடைய ஒப்புகச்சேர்த்துகறன் ()
- (ஆ) ஒப்புகச்சேர்த்துகறன் ()
- (இ)நடுநிளை ()
- (ஈ) உடன்படவில்லை ()
- (உ) உறுதியுடைய உடன்படவில்லை ()

10. வேளாண்மை கலாவிடம்-19 கருவியைக்

- (அ) உறுதியுடைய ஒப்புகச்சேர்த்துகறன் ()
- (ஆ) ஒப்புகச்சேர்த்துகறன் ()
- (இ) நடுநிளை ()

(ஈ) உடன்படவில்லை

()

(உ) உறுதியுடன் உடன்படவில்லை

()

11. கருவியுள்ளே ஒத்தாளாகவே வில்லை

(அ) உறுதியுடன் ஒப்புகச்சேர்வோர்களே

()

(ஆ) ஒப்புகச்சேர்வோர்களே

()

(இ) நடுநிலை

()

(ஈ) உடன்படவில்லை

()

(உ) உறுதியுடன் உடன்படவில்லை

()

12. தனிப்பட்ட பொதுமையுடைய உபேரணங்களின் பற்றாக்காளர்

(அ) உறுதியுடன் ஒப்புகச்சேர்வோர்களே

()

(ஆ) ஒப்புகச்சேர்வோர்களே

()

(இ) நடுநிலை

()

(ஈ) உடன்படவில்லை

()

(உ) உறுதியுடன் ஒப்புகச்சேர்வோர்களே

()

13. கருவியுடைய பரவாகம் என்ற அசம்

(அ) உறுதியுடன் ஒப்புகச்சேர்வோர்களே

()

(ஆ) ஒப்புகச்சேர்வோர்களே

()

- (இ) நடுநிளை ()
- (ஈ) உடன்படவில்லை ()
- (உ) உறுதியுடைய உடன்படவில்லை ()

14. கனெவரிடம்-19 பரிகரத்தான சய்ய மகன் பயந்தனர்

- (அ) உறுதியுடைய ஒப்புகச்சுள்ளேகறன் ()
- (ஆ) ஒப்புகச்சுள்ளேகறன் ()
- (இ) நடுநிளை ()
- (ஈ) உடன்படவில்லை ()
- (உ) உறுதியுடைய உடன்படவில்லை ()

தனிப்பட்ட பொது உபரணங்கள்

அணியும்கபு ஏற்பட்ட

பிரச்சனைகள்

15. உணவு, தண்ணீர் கட்டிக் கொடுக்க மறுக்கவில்லை

- (அ) உறுதியுடைய ஒப்புகச்சுள்ளேகறன் ()
- (ஆ) ஒப்புகச்சுள்ளேகறன் ()
- (இ) நடுநிளை ()
- (ஈ) உடன்படவில்லை ()
- (உ) உறுதியுடைய உடன்படவில்லை ()

16. கனல் ஒவ்வொரு

- (அ) உறுதியுடைய ஒப்புகச்சுள்ளேகறன் ()
- (ஆ) ஒப்புகச்சுள்ளேகறன் ()
- (இ) நடுநிளை ()
- (ஈ) உடன்படவில்லை ()

(உ) உறுதியுடைய உடன்படவில்லை ()

17. ஸ்திரீயின் மேலும் மூலியத்தில்லை

(அ) உறுதியுடைய ஒப்புகச்சேஷ்டீகறன் ()

(ஆ) ஒப்புகச்சேஷ்டீகறன் ()

(இ) நடுநிலை ()

(ஈ) உடன்படவில்லை ()

(உ) உறுதியுடைய உடன்படவில்லை ()

18. வியர்வை

(அ) உறுதியுடைய ஒப்புகச்சேஷ்டீகறன் ()

(ஆ) ஒப்புகச்சேஷ்டீகறன் ()

(இ) நடுநிலை ()

(ஈ) உடன்படவில்லை ()

(உ) உறுதியுடைய உடன்படவில்லை ()

19. யூரிடமும் கபம் மூலியத்தில்லை

(ஆ) உறுதியுடைய ஒப்புகச்சேஷ்டீகறன் ()

(ஆ) ஒப்புகச்சேஷ்டீகறன் ()

(இ) நடுநிலை ()

(ஈ) உடன்படவில்லை ()

(உ) உறுதியுடைய உடன்படவில்லை ()

20. குடும்பத்தினளர ஸ்திரீயின் முடியவில்லை

(ஆ) உறுதியுடைய ஒப்புகச்சேஷ்டீகறன் ()

(ஆ) ஒப்புகச்சேஷ்டீகறன் ()

(இ) நடுநிலை ()

- (ஈ) உடன்படவில்லை

()
- (உ) உறுதியுடன் உடன்படவில்லை

()

APPENDIX- VI

PHOTOGRAPHICAL EVIDENCE OF DATA COLLECTION

