**RESEARCH ARTICLE**      **OPEN ACCESS**

# A STUDY TO ASSESS PERCEIVED STRESS AND COPING STRATEGIES FOR COVID-19 AMONG GNM 3RD YEAR STUDENTS IN INTEGRAL COLLEGE OF NURSING LUCKNOW.

[1*]Juhi Tiwari, [1]Zahid Imam, [1]Sarth Nagar, [1]Shallu Singh, [1]Shalini Gaur, [1]Jyotasna Verma, [1]Rohit Kumar, [1]Neha Singh, [1]Manisha Yadav, [2]Shubham Gupta and [3]Bably Singh

[1]Bsc. (N) Students, Integral College of Nursing, Integral University
[2]Msc Psychiatric (N), Lecturer, Integral College of Nursing, Integral University
[3]Bsc (N), Nursing Tutor, Integral College of Nursing, Integral University

## ARTICLE INFO

## ABSTRACT

**Background:** The COVID 19 epidemic as a rapidly spreading disease has given rise to a range of negative cognitive reactions and emotions in at-risk populations. The COVID-19 epidemic is likely to have chronic psychotic manifestations such as depression, anxiety, panic disorder, and psychosomatic manifestations. The aim of the study is to find out the association between the perceived stress and coping strategies of GNM 3rd year students. **Methods:** A study to assess perceived stress and coping strategies for COVID19 among GNM 3rd year students in Integral College of Nursing, Lucknow, U.P. Level of stress assessed with Perceived Stress Scale and Brief Coping Scale. Socio-demographic is also obtained from the students by using a semi-structured socio-demographic proforma. **Results:** The study revealed that majority of students (92.1%) were in the age group of 19-25 years. Result showed that only (2.6%) has mild perceived stress, (97.4%) had moderate perceived stress and most of the students reported moderate coping strategies (97.4%). There was no significant correlation (0.291) between perceived stress and coping strategies mechanism of GNM 3rd year nursing students. **Conclusion:** Perceived stress and coping strategies associated with GNM 3rd year students suggest that perceived stress may be a very important factor influencing in GNM 3rd year students. Majority of students had mild stress and average coping, in order to prepare them to cope up with any stressful situations.

## INTRODUCTION

The COVID 19 epidemic as a rapidly spreading disease has given rise to a range of negative cognitive reactions and emotions in at-risk populations. Consequently, in addition to adverse effects on physical health, the COVID-19 epidemic is likely to have chronic psychotic manifestations such as depression, anxiety, panic disorder, and psychosomatic manifestations (Qiu, 2020). During India's lockdown period, nationwide abrupt restrictions on travel, lack of work, no daily financial expenses and no financial means to take care of quarantine regulations, all result in high levels of concern, which in turn lead to social form motivated by irresponsible behavior and terror.

*\*Corresponding author: Juhi Tiwari,*
Bsc. (N) Students, Integral College of Nursing, Integral University.

According to psychosocial issues among migrants enlisted during COVID-19, internal migrant workers suffered from high levels of concerns and fears due to various concerns in the COVID epidemic, and required psycho-social support (Government of India, Ministry of health and Family welfare, 2020). Ability to develop common mental disorders COVID-19 is likely to be affected by negative emotional responses secondary to the epidemic, due to an already high sensitivity to mental stress compared with non-migrant, background populations. Social exclusion is inversely associated with migrants' mental health (Zhou, 2020). Mental health professionals, along with factory medical officers, general medical practitioners, trained community health workers, must also integrate with public mental health services to deal with the ups and downs of mental illnesses in internal migrant workers (Dong, 2020). The mental health and psychosocial

impact of COVID-19 has thus been far-reaching. Responses to social distancing and lockdown such a requirement has meant long separation from families (for those working away from their hometowns), financial stress and Mental health issues following the COVID-19 pandemic stem from 'normal' people being exposed to 'extraordinary situations'.Another maladaptive coping is through the use of mind-altering substances. Uncertainty and a sense of loss of control are undoubtedly the pathogenic agents for anxiety, panic, and depression (Inter-Agency Standing Committee, 2017). Approximately 25% of their sample experienced anxiety symptoms, which were positively related to educational delays,economics, concerns of the epidemic, In addition, in several student surveys administered around the world, a survey by young minds reported that 83% of young respondents agreed that the epidemic worsened pre-existing mental health condition, primarily school closures, routines loss of restricted relation (American College Health Association, 2019). The nursing program is offered to prepare nurses for leadership positions in nursing and health sectors that can serve as specialist nurse practitioners, advisor, teacher, administrator and investigator in wide variety of professional (Liu, 2019).

## MATERIALS AND METHODS

A non – experimental research approach, cross-sectional descriptive study design was followed. The study was conducted between June 2020 to Jan 2020in a centre located in Lucknow, India, The Institutional Ethics Committee approval was obtained before the study.Population of the study was GNM 3rd year students, who were perceived stress and coping strategies in Integral College of Nursing, and who are willing to participate in the study were enrolled. Nonprobability purposive sampling was carried out, and out of 38 calculated sample size 38 participants were studiedas per inclusion criteria. Socio-demographic were age group, gender, Domicile, type of family, educational status, marital status, occupation and monthly family income, father occupation, mother occupation, father's educational status, mother's educational status and faced pandemic or epidemic before.Perceived Stress Scale (PSS) and Brief Coping Strategies (BCS) were used to measure the perceived stress and coping strategies of the students. Nominal data were described and expressed in frequency and percentage. Both descriptive and inferential statistics was used to analyze data. Correlation coefficient (Pearson correlation) was used to find out association between, perceived stress and coping strategies. Descriptive statistics (frequency distribution and percentage, mean and SD) was used to analyze the perceived stress and coping strategies.

**Strength and limitations:** The specified population assessed in this research study and standardized tools used were the strength of the study. The limitations of the study were small sample size, the exhaustive set of variables that might have been associated with depression and stress had not been examined and the study was conducted in one setting but finding may vary in different setting.

## RESULTS

During the study period, 38 perceived stress students were enrolled in the study based inclusion criteria. Table 1a: Shows socio demographic detail ofvariables in GNM 3rd year students, majority were in age group of 19-24 years (92.1%).

A total of 38 GNM 3rd year students 5 male and 33 females were interviewed in this study. However, much difference was observed in the percentage of GNM 3rd year students in males (13.2%) and females (86.8%). Majority of students were belonging to urban area (57%). Majority of students (55.3%) have Joint family and rest (44.7%) have Nuclear family. The percentage of illiterate elderly was higher in total (18.4%). As per marital status most of elderly with depression were married (15.8%) then unmarried (84.2%). Distribution of study sample according to employment found maximum of students were retired from their job (36.8%) and housewife (86.8%). Regarding monthly family income majority (13.2%) had family income Rs up to -10,000-15,000/-.

Table 5a shows that the coefficient of correlation of perceived score and coping score in GNM 3rd year students was calculated by using Karl Pearson method which was found significant correlated at p < -0.2991**. This table indicates Perceived stress and coping strategies significantly correlated in GNM 3rd year students as correlation value was significant at 0.07 level andperceived stress and coping strategies are significantly moderately correlated. It indicates if the perceived stress or coping strategies increases.

## DISCUSSION

**Association between perceived stress with socio-demographic and variables:** In the present study, the majority of subject (95.1%)was from age group of 17- 19years and this corresponds with the findings reported by Sheroun, D (2020). Regarding gender most of study subjects were female (98%). Similar findings were noted in a study by Nebhinani, M (2013). The participants reporting of comorbidity in the family were only 20.2% and 61.4% of the participants parents were government employed. Maximum of the participants received contradictory information of COVID19 through the internet. This study showed majority of patients (60%) were from urban area and rest (40%) from rural area. Similar finding were noted in a study by Sengupta P et al (2015). Majority of patients were from nuclear family (98.3%) which is the finding reported bySubba R et al. (2020) Majority of students were monthly family income (40.6%) was 10,000/ month. This finding is contradictory of finding reported by. The study revealed that (76.58%) of the participants had moderate coping strategies, while as 18.5% had high coping strategies and only 4.92% had low coping strategies.23In present study majority of (83%) students were found with moderate perceived stress but contradictory finding is found in a study conducted by Aslan H et al[12], Seron D et al. (2020) Subba R et al. (Effective stressors in clinical education, 2018) In the present study, result revealed that majority of students (51.7%) had mild stress and (47.7) students had moderate stress and remaining (1.7%) students had severe stress. This was supported by the study done by Sheu et al. (2002) In the study 86.7% students are having well-coping and 13.3% having coping average coping and there is no students with poor coping. The above findings of the study are compatible with the findings of Sheu et al. The present study findings shows that there was no significant association between stress level score and was selected demographic variables such as age, gender, place of living, types of family. Finding of the present study are consistent with another study conducted Bangalore to assess the stress and coping strategies adopted by the nursing students.

**Table 1a. Frequency & Percentage distribution of Socio Demographic details of elderly with depression: (n=38)**

| Variable | Categories | F | % |
|---|---|---|---|
| Age group | 19-24 | 35 | 92.1 |
| | 25-30 | 3 | 7.9 |
| | 31-35 | 0 | 0 |
| | Total | 28 | 100.0 |
| | Male | 5 | 13.3 |
| Gender | Female | 33 | 86.8 |
| | Total | 38 | 100.0 |
| | Rural | 22 | 57.9 |
| | Urban | 16 | 42.1 |
| Domicile | Total | 38 | 100.0 |
| | Joint Family | 21 | 55.3 |
| | Nuclear Family | 17 | 44.7 |
| | Total | 38 | 100.0 |
| Type of family | 10+ 2 Pass | 26 | 68.4 |
| | Graduate | 12 | 31.6 |
| | Total | 38 | 100.0 |
| | Married | | |
| Education | Unmarried | 6 | 15.8 |
| | Total | 32 | 84.2 |
| | Up to 5000 | 38 | 100.0 |
| | 5000-10000 | | |
| Marital status | 10000-15000 | 3 | 7.9 |
| | >15000 | 6 | 15.8 |
| | Total | 5 | 13.2 |
| | Unemployed | 24 | 63.2 |
| Monthly family income (in rupees) | Private job | 38 | 100.0 |
| | Government job | | |
| | Businessman | 5 | 13.2 |
| | Other | 11 | 28.9 |
| | Total | 7 | 18.4 |
| Father's occupation | Homemaker | 9 | 23.7 |
| | Private job | 6 | 15.8 |
| | Government job | 38 | 100.0 |
| | Businessman | | |
| | Others | 33 | 86.8 |
| | Total | 3 | 7.9 |
| | Illiterate | 2 | 5.3 |
| Mother's occupation | Up to 5th | 0 | 0 |
| | Up to 12th | 0 | 0 |
| | Graduate | 38 | 100.0 |
| | Postgraduate | | |
| | Total | 1 | 2.6 |
| | | 5 | 13.2 |
| | Illiterate | 12 | 31.6 |
| Father's educational status | Up to 5th | 14 | 36.8 |
| | Up to 12th | 6 | 15.8 |
| | Graduate | 38 | 100.0 |
| | Postgraduate | | |
| | Total | 6 | 15.8 |
| | | 11 | 28.9 |
| Mother's education | Yes | 11 | 28.9 |
| | No | 7 | 18.4 |
| | | 3 | 7.9 |
| | | 38 | 100.0 |
| Have you ever faced pandemic or epidemic before? | | 0 | 0 |
| | | 38 | 100.0 |

**Table 2. Frequency & percentage distribution of Perceived Stress Gradation in GNM 3rd year students (n=38)**

| Variable | Categories | f | % |
|---|---|---|---|
| Level of stress | Low | 1 | 2.6 |
| | Moderate | 37 | 97.4 |
| | High | 0 | 0 |
| | perceived stress | 38 | 100.0 |
| | Total | | |

Table 2depicts the level of perceived stress. Majority of students (97.4%) with perceived stress have moderate level of stress and rest (2.6%) had low perceived stress.

**Table 3. Frequency & percentage distribution of Brief Coping Strategies in GNM 3rd year students (n=38)**

| Variable | Categories | f | % |
|---|---|---|---|
| Level of stress | Low | 0 | 0 |
| | Moderate | 37 | 97.4 |
| | High perceived stress | 1 | 2.6 |
| | | 38 | 100.0 |

Table 3 The data presented in the table show that (97.4%) of GNM 3rd year nursing students had moderate coping strategies and remaining (2.6%) of high level of coping strategies.

## Section: IV Descriptive statistics of perceived stress score and coping score

**Table 4a. 4The analysis of descriptive statistics showed that perceived stress and coping strategies (n= 38)**

| | Perceivedstressscore | Coping score |
|---|---|---|
| N | 38 | 38 |
| Mean | 19.76 | 62.58 |
| Std. Error of mean | .458 | 1.241 |
| Median | 19.00 | 63.50 |
| Mode | 17[a] | 59[a] |
| Std. Deviation | 2.823 | 7.650 |
| Variance | 7.969 | 58.521 |
| Range | 12 | 34 |
| Minimum | 13 | 45 |
| Maximum | 25 | 79 |
| Sum | 751 | 2378 |

## Section V: Association between perceived stress and coping strategies of GNM 3rd year nursing students

**Table 5a. Correlation between perceived score and coping score (n= 38)**

| | Mean | Std. Deviation | N | Pearson correlation | Sig. |
|---|---|---|---|---|---|
| Perceived stress score | 19.76 | 2.823 | 38 | | 0.07 (NS) |
| | | | | -0.2991 | |
| Coping score | 62.58 | 7.650 | 38 | | |

** Correlation is significant at the 0.07 level (2 tailed).

## CONCLUSION

Hence, it may be concluded that a strong relationship was found between perceived stress and coping strategies in GNM 3rd year with type of family, educational status, Father occupation, Mother occupation and Family income. This study helps to focus on the importance of life events especially of perceived stress aspect in order to achieve maximum level of coping strategies. Coping help to adapt individually new and challenging situations important of stabilization. In the time of lockdown and COVID19 pandemic important to oneself to new modified routine. The data collected was subjected to analysis for descriptive statistic in terms of frequencies and percentages and inferential statistics like standard deviation and Pearson's correlation coefficient were computed.

**Implications:** The findings of this study have implication in various areas ofNurses should be evaluated periodically to assess stress levels practice and service education about stress management andnurses working in the outpatient and in patients department need to identify the various coping strategies used by GNM nursing students.To plan according to the needs of students and use of the adaptive coping (problem focused and emotional focus) coping strategies that were found to be helpful (e.g. Planning, active coping etc.).

**Glossary of Abbreviations**

| | | |
|---|---|---|
| 1. | COVID | Corona virus disease |
| 2. | BCS | Brief coping scale |
| 3. | PSS | Perceived stress scale |
| 4. | SD | Standard deviation |
| 5. | GNM | General nursing and midwifery |

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