Psychological Distress and Coping among Undergraduate Nursing Students of Kashmir during Pandemic Covid 19

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Abstract:- Psychological distress refers non specific symptoms of stress, anxiety and depression considered as a warning to the mental health. This research was conducted during COVID-19 to assess the major implications of mental health among nursing students due to closure of colleges, universities and offline classes which restricted one to one and physical interaction globally, Kashmir as well. The study examined the psychological distress and coping adopted by nursing undergraduate students of Kashmir during this pandemic Covid 19. Methods: A cross- sectional online descriptive study was conducted; using purposive sampling consists of 183 under graduate nursing students from selected nursing colleges of Kashmir. Data was gathered as online responses to a questioner from17-10-20 to 7-11-2020, includes socio demographic variables, psychological distress scale (K10) and brief coping resilience scale. Results: Among 183 participants the majority of 171 (93.4%) were in the age group of 19-23 and female 122(66.7%).Most had younger 80 (43.7%) birth order belonging to nuclear family 141(77%) with majority from rural area 147 (80.3%).Over the last four weeks majority of study participants have perceived moderate psychological distress 61(33.3) with Medium75(41%) and low 63(34.4) resilient copers with a p-value of 0.000*.Negative Correlation was found. Conclusions: Most of the study subjects reported sufferings from varying degree of psychological distress during covid crisis over the 4 weeks. This reveals that there is need of an intervention to enhance skill of coping strategies and decrease distress in this crisis situation.

Keywords:- Covid -19, Psychological Distress, Coping Resilience, Under Graduate Students, Mental Health.

I. INTRODUCTION

Corona-virus disease was first found in china in late 2019 declared as pandemic by world health organization globally in February 2020, that resulted massive disruptions to everyday life,[1] including in Jammu Kashmir which is one of the Union Territory of India.

Mortality and Morbidity rates were significantly increased with implications on mental health and psychological wellbeing. Apparently, the pandemic was a major stressor as that of catastrophic events which according to diathesis-stress model leads psychological disorders among vulnerable groups such as students[2]. This pandemic has significantly affected college students physically, academically, financially and psychologically. Colleges and universities have reported that a number of students were tested positive for COVID-19[3,4.] In order to prevent widespread transmission of the COVID-19 virus among working staff, young and adult population, higher-education and other institutions except Health and Police across the country have rapidly switched from in-person to online learning. Within a short period of time, college students' life has drastically changed as they have been asked to leave campus, adjust to new living circumstances, and adapt to online learning platform[5]. Sudden change from offline to online, particularly in professional courses have increased distress among students. Because these courses are designed to include high levels of interaction and hands-on experiences such as practical's, labs, and/or artistic performance had a clear disadvantage in regards to the evaluation of students [6,7.] According to the students survey 4 out of 5 college students are facing financial difficulties due to the COVID-19 pandemic, However humans are dynamic in nature and has an ability to adapt with an ongoing situation of their life, people find out the ways of coping within the restrictions to mitigate the pandemic crisis. Such coping strategies include both behavioral and

psychological efforts to gain mastery, toleration, and minimize stressful events[8,9]. Positive coping has been associated with reductions in stress levels that results improved well-being, while as negative coping is associated with stress enhancement, resulting in increased psychological distress [9]. The extent to which coping increases or reduces psychological distress is highly dependent upon the collection of stressors, adaptation manners, and resources and the coping responses chosen to combat such stressors. [10]

➤ *Need of study*

Researchers work at college of nursing and found that online classes during covid 19 pandemic situation has hampered abilities and proficiency among students as there is no direct interaction between student and teacher .while talking to the students they felt distress and has changed their coping resilience because college is a platform for students in reducing distress/ mental illness and enhances their coping resilience so researchers found a need to assess the level of distress and level of coping resilience during covid 19 pandemic situation.

➤ *Objectives*
- To determine the levels of distress among undergraduate nursing.
- To assess the level of coping resilience among under graduate nursing students
- To compare level of distress and level of coping resilience among under graduate nursing students.
- To find an association of selected demographic variables.

II. METHODS

A. Research design

An online descriptive cross sectional research design was used.

➤ *Setting and Procedure*

The study was carried out on a sample of Bsc nursing students through electronic consent form and questioner to take their participation. Google form was disseminated by watsapps and emails. Data collection process took place over a period of one month from17-10-2020 to 20-12-2020.

➤ *Sampling;*

Purposive sampling with a sample size of 183 undergraduate nursing students of selected nursing colleges of Kashmir with a total population of 600 students . The sample size was estimated by using slovins formula of sample size with a margin error of 5%.These colleges closed their classes on March 23 2020, and held its classes virtually in response to pandemic covid -19.

Selected Nursing Colleges of Kashmir approved the study with an **Inclusion criterion:** (a) undergraduate nursing students of selected nursing colleges of Kashmir. (b) Willing to

participate. **Exclusion criteria:** (a) Postgraduate students of nursing (b) not willing to participate.

➤ *Data Collection Tools*

Demographics: sociodemographic scale was formulated by researchers included Age, Gender, Birth order, family type and Domicile. **The Kessler Psychological Distress Scale (K10) developed by Kessler** professor of health care and policy, Harvard Medical School, Boston, USA. K10 is a 10-item scale that assesses the frequency of nonspecific psychological distress symptoms experienced during the last 30 days. Study subjects are asked to answer on a 5-point scale(1 = none of the time to 5 = all of the time) and the total score ranges from 10 to 50.Score under 20 indicates well, Scores 20-24 likely to have Mild distress, Scores 25-29 indicates Moderate Distress, Score of 30 & more means highly distressed. **Brief Resilient Coping Scale** consists of 4 questions indicates level of resilience copers developed by Sinclair V G, & Wallston, KA (2004). Total score ranges from 4 to 20. Scores of 4-13 indicate low resilient coping, 14-16 indicate medium resilient coping and 17-20 indicate high resilient coping.

B. Statistical Analysis

An analysis was done by using SPSS 16.0 software. Descriptive statistics was applied on demographic data and Kessler's Psychological Distress Scale (K-10) & Brief Resilient Coping Scale which was calculated and expressed in terms of the total number of subjects and percentages of the sample. ANOVA and Pearson Correlation were used to test the significance.

III. RESULTS

Table 1: Shows Frequency & Percentage of socio-demographic variables   N= 183

		Frequency & Percentage
Age in years	19-23	171 (93.4%)
	24-27	12 (6.6%)
Gender	Male	61 (33.3%)
	Female	122 (66.7%)
Birth order	Elder	37 (20.2%)
	Middle	66 (36.1%)
	Younger	80 (43.7%)
Family Type	Nuclear	141 (77%)
	Joint	40 (21.9)
Domicile	Rural	147 (80.3%)
	Urban	36 (19.7)

Table 2: Frequency & Percentage distribution of subjects according to Level of distress & Coping Resilience. (N=183)

Level of severity	Frequency & Percentage	Level of coping Resilience	Frequency & Percentage
<20 (well)	29 (15.8%)	4-13 (Low)	**63 (34.4%)**
20-24 (Mild)	**56(30.6%)**	14-16(Medium)	**75 (41.0%)**
25-29 (Mod)	**68(37.2%)**	17-20 (High)	45 (24.6%)
30> (severe)	30(16.4%)		

Table 3: Shows an association of demographic variables with distress score (K10)

Variable	Mean± SD	F	Df	p. value	Inference
Age in years	1.07 ±0.249	1.574	182	0.197	**NS**
.Gender	**1.67 ±0.473**	**5.189**	**182**	**0.002***	**S**
Type of family	1.24 ± 0.453	0.554	182	0.646	NS
Birth order	2.23±.760	0.276	182	0.843	NS
Domicile	1.20 ± 0.399	1.496	182	0.218	NS

Table 4: Shows an association of demographic variables with coping resilience

Variable	Mean ±SD	F	Df	p. value	Inference
Age in years	1.07 ±0.249	1.633	182	0.198	NS
Gender	**1.67 ±0.473**	**4.770**	**182**	**0.01***	**S**
Type of family	1.24 ± 0.453	1.037	182	0.478	NS
Birth order	2.23±.760	0.742	182	0.357	NS
Domicile	1.20 ± 0.399	4.581	182	0.011	NS

Table 5: Correlation between K10 scale & BRCS

	Mean ±SD	df	Significance
K10 scale	2.2623 ± 1.12760	-150	**0.042***
BRCS	1.9016 ± 0.76399		
K10-- BRCS (t-test)	0.644±1.4478	4.340	**0.00**

IV. DISCUSSION

Different Researches has studied a significant impact of public health emergencies on mental health as covid one of the major crisis has described change in every activity of daily living as well as drastic change in mental health of students. The current study was to examine the level of distress, level of coping resilience and its correlation among undergraduate nursing students of selected college of Kashmir.

The current study confirms the findings of Distress and coping resilience among undergraduate nursing students in covid 19 situations from selected colleges of Kashmir. It was found that majority of students were lying in the age group of 19-23 (93.4%), had majority of subjects were females (66.7%), mostly belonging to nuclear family (77%), had a domicile majority from rural area (80.3%) with younger birth order (43.7%).While applying the K10 Distress scale majority of students had well (<20) mental health 29 (15.8 %,) followed by moderate distress level 68 (37.2%) with a mild 56 (30.6%,) and severe 30 (16.4%) distress level respectively. Subsequently majority of students had medium 75 (41%) and low 63 (34.4 %,) level of coping resilience. The results revealed that only 45 (24.6%) had high level of coping resilience.

The current study shows that Mean± SD of Gender is 1.67 ±0.473 which is significant with a p-value of 0.002 and 0.01. However other demographic variables are non-significant found when associated with (K10) Distress level and Coping resilience as shown in table 4&5.Therefore mental health gender wise has been definitely affected during this covid 19 situation and there is perfect negative correlation found between distress and coping resilience that indicates whenever there is low distress level of coping is high and vice versa. The findings of this study show that subjects had mild and moderate distress level with moderate and low copers resilience as shown in table 6.

Similiar Study in Guilan, Iran was conducted by Ali Monfared, Leila Akhondzadeh etal[11], on Psychological Distress and Coping Strategies among Clinicians and Medical Students During the COVID-19 Pandemic. They used Kessler Psychological Distress scale (K10), and coping strategies among 109 clinicians and medical students working in Razi Hospital of Rasht, Iran during the COVID-19 pandemic. The results were revealed as mean age of the responders was 36.14 years (SD = 10.68). The mean K10 total scores was 12.94 (SD = 7.64). There was a significant negative correlation between age and K10 total scores (r = -0.397, P < 0.001). Single participants had a higher K10 total score compared with married ones (P = 0.003). Furthermore, interns had a higher K10 total score compared with residents (P = 0.012) and faculty members (P < 0.001).[21]

V. CONCLUSION

Several studies need to be done among the nursing students as it is the vulnerable group in regard of their mental health belonging to Kashmir because the covid 19 pandemic has disturbed mental health of students because of online and continuous classes, has decreased efficiency of professionals which increased distress level and decreased coping resilience among the students of Kashmir with respect to conflict zone area. Our finding suggest that college students must be provided with mental health interventions by professionally trained person that could help students to address their distress level and improve in their coping..

Conflict of interest: no conflict of interest.

Ethical clearance: Permission was granted by Head of Institutions'

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