

Psychological Well-Being and Coping Styles among Medical Interns of a Teaching Care Hospital During The Covid Pandemic

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Abstract:

Background: Medical interns were very active during the covid pandemic despite their routine schedule of working long hours. Who were in the first line of identifying, investigating, and managing patients in the background of the covid -19 pandemic. The study was conducted to compare the Psychological Well-Being and Coping styles among medical interns in different time periods of the pandemic.

Aim: To assess the psychological wellbeing and Coping skills of Medical interns during the different time periods of the pandemic and study the correlation between Psychological Well-Being and Coping styles adopted

Methods: A cross-sectional survey of the intern batches labelled as Group A (2014-2015 batch) and Group B (2015-2016 batch) of Medical interns who did their internship in the years 2020 and 2021 respectively. RYFF scale of Psychological Wellbeing and BRIEF COPE (Coping Orientation to Problems Experienced Inventory)-was used to assess the Psychological Well-Being and Coping respectively, following which data analysis was done

Results: More positive wellbeing in the Domains of Autonomy, Personal Growth, Purpose In Life And Self-Acceptance was noted in Group B compared Group A. Group a used avoidant Coping style compared to Group B which used approach Coping style.

Conclusion: There is a correlation between Psychological Well-Being and Coping among the medical interns which gets influenced during the pandemic. Hence there is a need to address the well-being of medical interns through formulated interventions.

Key word: Coping, Psychological well-being, covid19, medical interns, Frontline, Psychological impact

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I. Introduction

Covid 19 pandemic had caused huge impact both physically and psychologically, on a majority of individuals all over the world. The whole world's main focus was on the disease and disorders there was an unaddressed domain of wellbeing and Coping. In the struggle for survival, the concept of wellness and wellbeing were sacrificed and survival took priority.

Wellness is considered a conscious, self-directed, and evolving process of achieving full potential⁽¹⁾. It is multidimensional, positive, and affirming. Coping is an effort to prevent or diminish the threat, harm, and loss, or to reduce the distress often associated with those experiences directed to reduce the negative emotional distressing consequences. ⁽²⁾ Coping strategies play an important role in physician career development. ⁽³⁾

During the covid pandemic, there was a sudden exposure to external stress that had an impact on wellbeing and the ability to cope was essential to handle the impact. This especially had more impact on the frontline health care providers⁽⁴⁾. Multiple studies in the past during the SARS 2003 outbreak have shown that health care workers were at risk to develop symptoms such as post-traumatic stress disorder, burnout syndrome, physical and emotional exhaustion, depersonalization, and dissociation ^(5,6,7)

Medical interns were active during the covid pandemic despite their routine schedule of working long hours. The situation was unique in the sense that these medical interns were in the first line of identifying, investigating, and managing patients in the background of the covid -19 pandemic. The intensity of training was

itself associated with a significant reduction in wellbeing including biological functions, social interactions, and an increase in missing significant events. It was a lot more influence in the time of uncertainty brought on by the covid pandemic, with fear of being infected and facing the consequence being the added burden of those who work in the present period. Multiple stressors, as well as positive aspects of medical training, have an impact on medical student well-being.

Paying attention to individual students' Coping reservoirs can help promote well-being and reduce burnout.

It's important to cultivate the skills to sustain their well-being throughout their careers for promotion of physician resilience and personal fulfilment, and for enhancement of professionalism and patient care.⁽⁸⁾

However there were only few studies which assessed the Psychological Well-Being among students and health care workers. Hence we planned to conduct a study to assess the Psychological Well-Being and Coping among Medical Interns who were doing their residency in different years of the pandemic 2020 and 2021 respectively.

II. Aims And Objectives

AIM: To assess the Psychological Well-Being and Coping skills of medical interns during the COVID 19 pandemic in different time periods and study the correlation between Psychological Well-Being and Coping styles adopted.

OBJECTIVES:

- 1) To assess the Psychological Well-Being of Medical Interns
- 2) To study the Coping styles of Medical Interns
- 3) To study the correlation between Psychological Well-Being and Coping style of Medical Interns during different time periods

III. Materials And Methods

Methodology: A cross-sectional study of the medical interns labelled as Group A (2014-2015 batch) and Group B (2015-2016 batch) who did their internship in different time periods 2020 and 2021 respectively in their clinical postings were approached for the study.

Inclusion and exclusion criteria: Medical interns who agreed to participate in the study were included. Medical interns who have known psychiatric illness /chronic medical illness /not willing to participate were excluded.

Instruments used: The study was a questionnaire-based cross-sectional study initiated after obtaining Institutional Ethical Committee Approval. Basic demographic details were collected followed by the administration of the RYFF Psychological Well-Being and BRIEF (Coping Orientation to Problems Experienced Inventory) Cope scale.

RYFF Psychological Well Being Scale ⁽⁹⁾ is a multidimensional model of Psychological Well-being which consists of 6 domains. Autonomy- the sense of self-determination, Environmental Mastery: the capacity to manage effectively one's life and surrounding world, Self-Acceptance: positive evaluations of oneself and one's past life, Personal growth: a sense of continued growth and development as a person. Purpose in life: the belief that one's life is purposeful and meaningful, positive relations with others: the possession of quality relations with others.

The scoring was done on a Likert scale from strongly disagree to strongly agree with 42 items. The participants were categorised as high scorer or low scorer in each domain.

Brief COPE (Coping Orientation to Problems Experienced Inventory)⁽¹⁰⁾ is an abbreviated version of the COPE Inventory to measure Coping. The questionnaire assesses the results based on two outcomes, Approach and Avoidant Coping styles. The avoidant style of Coping contains sub-domains of Self-distraction, Substance use, Denial, Self-blame, Behavioural disengagement, Venting. The approach style of Coping contains sub-domains of Active Coping, Emotional support, Use of informational support, Positive reframing, Planning. The scale scored on a Likert scale with 28 items. Based on the response individuals Coping Styles as Approach Or Avoidant Style was determined.

Statistical analysis: Descriptive statistical analysis in which mean and standard deviation were calculated for each group. The Psychological Well-Being and its subdomains were compared between the groups. The Coping styles of the participants (approach/avoidant style) were compared between the groups through appropriate statistical analysis. The correlation between Psychological Well-Being and Coping styles determined using spearman's correlation was compared against Group A and Group B.

IV. Results

In our study, there were 80 participants 40 each in Group A and Group B respectively. There were 16 males in Group A and 15 males in Group B whereas 24 females in Group A and 25 females in Group B. The mean age of the participants in Group A was (22.62±0.54.) the mean age of the participants in Group B was (22.75±0.70). The mean age of male participants was (22.74 ±0.68) and the mean age of female participants was (22.65±0.59).

TABLE 1: PSYCHOLOGICAL WELL BEING

S.NO	DOMAINS	GROUP A	GROUP B	TOTAL	P-VALUE	F VALUE
1.	Autonomy	20.92	28.97	24.95	<.00001	31.692
2.	Environmental mastery	22.62	16.82	19.72	0.0063	7.861
3.	Personal growth	25.07	32.30	28.68	0.0001	15.957
4.	Positive relationship	30.10	30.52	30.31	0.7876	0.073
5.	Purpose in life	29.45	33.50	31.47	0.1235	6.561
6.	Self-acceptance	28.92	32.97	30.95	0.0132	6.423

Group B had the highest score in the domain of purpose in life (33.5) the lowest score in the environmental mastery domain(16.82). Group A had the highest score in the positive relationship domain(30.1) lowest in the autonomy domain(20.92). The domains of the RYFF Psychological Well-Being scale were compared between Group A and Group B. The difference in the domain scores of autonomy, environmental mastery, personal growth, and self-acceptance between Group A and Group B was statistically significant however there was no difference in the domain of positive relationship between the groups.

TABLE 2: BRIEF COPE – COPING STYLE

BRIEF COPE	GROUP-A	GROUP-B	TOTAL	P-VALUE
Avoidant Coping style	Mean: 17.5±4.19	Mean: 11.15±3.35	14.32	<.00001
Approach Coping style	Mean: 9.97±2.73	Mean: 18.82±2.22	14.42	<.00001

The Coping styles in the form of Approach /Avoidant Coping were compared between Group A and Group B. Group A scored HIGHER in the avoidant Coping style (17.5±4.19) and Group B score higher in the Approach Coping Style (18.82±2.22). This difference in the nature of Coping styles between the two groups was statistically significant. (p<0.00001).There is no correlation between total RYFF Psychological Well-Being scale score and the total brief cope score ($r_s = -0.01247, p(2-tailed) = 0.91255$)

TABLE 3: COMPARISON OF WELLBEING AND COPING, RYFF v/s BRIEF-COPE

S.NO	DOMAINS	RYFF V/S BRIEF-COPE	RYFF V/S BRIEF-COPE (APPROACH
		(AVOIDANT COPING STYLE)	COPING STYLE)
		GROUP A	GROUP B

1.	Autonomy	$r_s = -0.48774, p(2\text{-tailed}) = 0.0001.$	$r_s = 0.48325, p(2\text{-tailed}) = 1E-05.$
2.	Environmental mastery	$r_s = 0.15193, p(2\text{-tailed}) = 0.17852.$	$r_s = -0.16887, p(2\text{-tailed}) = 0.13429.$
3.	Personal growth	$r_s = -0.26678, p(2\text{-tailed}) = 0.01675.$	$r_s = 0.41661, p(2\text{-tailed}) = 0.00012.$
4.	Positive relationship	$r_s = -0.13831, p(2\text{-tailed}) = 0.22115.$	$r_s = -0.06874, p(2\text{-tailed}) = 0.54461.$
5.	Purpose in life	$r_s = -0.29696, p(2\text{-tailed}) = 0.00747.$	$r_s = 0.17796, p(2\text{-tailed}) = 0.11426.$
6.	Self-acceptance	$r_s = -0.33095, p(2\text{-tailed}) = 0.00271.$	$r_s = 0.31764, p(2\text{-tailed}) = 0.00409.$

The domains in the RYFF Psychological Well-Being scale of Group A when correlated with their brief cope score which had predominant avoidant Coping style, negative-correlation was observed in the domains of autonomy, personal growth, purpose in life, positive relationship, and self-acceptance which is significant. The domains in the RYFF Psychological Well-Being scale of Group B when correlated with their brief cope score which had predominant approach Coping style, a positive correlation was observed in the domains of autonomy, personal growth purpose in life, and self-acceptance which is significant

V. Discussion:

This study assessed the well-being and Coping in Medical interns during the covid pandemic. The sample consisted of two batches Group A (2014-2015 batch) and Group B (2015-2016 batch) of Medical interns who went through their residency during the pandemic years of 2020 and 2021 respectively. The first batch went through their residency during the first wave of the covid pandemic in 2020 during this time, the psychosocial situation was different compared to the second batch which went through their residency in 2021.

Multiple factors influence Psychological Well-Being and Coping during this pandemic. The studies of the same nature have been done in various settings and reflected that Psychological Well-Being is affected during this pandemic among the health care workers and was influenced by their Coping strategies ⁽¹¹⁾. In a study conducted among university students to understand the profile of Psychological Well-Being and Coping strategies during the covid pandemic, it was found that the higher the profile of Psychological Well-Being higher the use of three Coping strategies ⁽¹²⁾.

Group A had lower Psychological Well-Being than Group B which could have been influenced by the emergence of a sudden psychosocial stressor. The lower scores in autonomy can be attributed to the social pressure and uncertainty that was prevalent and these have a cyclical relationship where the personal growth was not a priority but rather enduring and survival took over as the main concern because of the fear that prevailed during 2020. Quarantine and social isolation led to a sense of loss of direction and uncertainty to plan since there was no viable answer or solution available to contemplate.

The impositions, increased burden, isolation, and fear must have caused a denial of what plans they had and acceptance that they would be missing out on the joys and plans they had could be a factor for a lowering of their Self-Acceptance. In comparison, the second batch came with adequate foresight knowledge, and support knew what they were getting into. we could see on correlation being that they were able to resist the social pressures since they had adequate time and knowledge to understand the situation and this had a positive impact on them having a better purpose in life and could adapt and plan better for the current scenario. Thus they were able to make a plan which reflects in them having aims and objectives based on the current situation. Thus they had a better acceptance since they had adequate support.

While in the aspect of Coping, both groups coped well but Group A used more of an avoidant Coping style compared to the second group which used a positive approach type of Coping. This can be ascertained by the sudden nature of the pandemic which lead to fear and an avoidant style compared to the second group which was able to understand and assess and hence had more of an approach-based Coping.

There is a correlation between Psychological Well-Being and Coping styles with a significant negative correlation in those with avoidant Coping styles in domains of autonomy, personal growth, purpose in life, and self-acceptance in the group an as against there is a significant positive correlation in those with Approach Coping styles in the domains of Autonomy, Personal Growth, And Self-Acceptance in Group B. The influence

of Coping Styles on the Psychological Well-Being between the two groups (A and B) during the different periods of the pandemic in our setting is significant.

VI. Conclusion

Our study was conducted to determine how students who were faced with a sudden adverse event with uncertainty and stress were able to cope and how it affected their Psychological Well-Being under different domains. It is very clear that Psychological Well-Being gets affected in times of crisis like a pandemic however it's largely influenced by the Coping styles as well. Approach style of Coping is associated with better Psychological Well-Being than avoidant Coping style. It is necessary to provide adequate support to the Medical interns who are entering the profession since fear and uncertainty in them lead to stress in them adopting maladaptive Coping strategies

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