

# Adopted Coping Strategies among Professionals in Stress Management- A Questionnaire Based Survey

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## ABSTRACT

**Background:** Stress may affect professionals' health and their professional performance. In present era of globalization where competition, novelty and change is a contributing factor in stress development and stimuli for tension, anxiety anger and behavioral changes ultimately lead to health problems. Coping strategies are then adopted to manage these stresses.

**Aim:** To uncover the level of stress, the major responses in regards to the imposed stress and ultimately to inquire the adopted strategies to cope with stressful situation in professionalism.

**Methods:** This multicenter cross-sectional survey was conducted among 257 participants of different level professions of different institute and departments of Grand Asian University (formerly Islam medical & dental college) from June – August 2021 and at Jinnah Sindh medical University (JSMU) from Feb – April 2022. Stress causes and major responses were accessed by well-structured preexisting validated questionnaires (consent taken by mail). Sociodemographic variables were taken using self-generated questionnaire comprising question about age, sex, education level, financial status, job level and marital status.

**Aim:** To access the adopted coping strategies by the professional in stress management in their professional tasks

**Results:** Major respondents of study (58.2%) were female followed by male (41.8%), 82% with age group 20 -35 years old, 38.7% were married, 47.7% from joint family system, 52.3% were graduated, 83.2% with less than 100,000 PKR income per month. The major cause of stress was No recreational activity (32%), Frequent travelling (36.3%), Working on holidays (14.5%), Complications from children (22.7%) and for disorganization or misfiring of system (23.8%). Major responses to stress including unable to recall things (34.4%), Unable to express their feeling with their social circle (30.1%), unable to focus on their job related tasks (24.2%), abdominal pain (23.8%), usually feel stressed (23.8%) and get disappointed (19.5%).

**Practical implication:** Although the findings of coping strategies in this study is emotional based coping which is considered the weak one and these findings reveals that stress among professionals is not much addressed which potentially placed hindrances in outcomes thus the organizational policy makers are suggested to make these consideration for better outcome and potential benefits of the professionals and organization to excel outcome and reduce health hazards.

**Conclusion:** This research revealed that professionals were actively involved in emotional focused coping strategies and typically indicates adoptive coping mechanisms.

**Keywords:** Stress, coping, strategies, job level, social support, health problems

## INTRODUCTION

Work stress is defined as the harmful emotional and physical reactions that occur when employees do not meet work needs and requirements (Canadian Mental Health Association, 2018). Work stress occurs in all professions and work settings, including healthcare where nurses work. Globally, the prevalence of work stress among nurses varies between 9.2% and 68%. Stress is defined as; the destructive emotional and harmful physical response that occurs in human body due to many reasons and one of most common factor is work related stress.<sup>1</sup> Occupational stress is stated as; the destructive emotional and harmful physical response that occur when the requirements of the work do not match the capabilities and needs of the worker.<sup>1</sup> Most of the clinicians are burnout due to psychological stress. The reason behind that is continuous burdened working.<sup>2</sup> This emotional distress mainly effect on health care provider's performance so that they cannot give their best services to patients.<sup>2</sup>

Health care practitioners are vulnerable on physical and mental stress and they cannot manage the balance in between the professional and personal life.<sup>3</sup> A study conducted on nurses and results concluded that Occupational stress burnout is also common in nurses that results due to continuous conscientiousness working. Many diseases are linked with professional stress even death can occur due to the stress.<sup>4</sup> Occupational stress has direct link to adopt different coping strategies that improves their happiness and relieves stress.<sup>5</sup> There are many different coping strategies to relieve from mental pressure. The most common and efficient coping strategy is use of emotional support from loved

ones, speak up about that issues and take help from your work.<sup>6</sup> One of the important coping strategy is meditation e.g.; different physical postures, Breathing techniques, Mantra, Imagination and mind focusing meditations etc. 30% of Professionals on the higher level position have relieved from stress because of different yoga techniques and meditation.<sup>6</sup>

In Buddhism, The most likely coping solution is mindfulness relaxation technique that is also a type of meditation in which you focus on being intensely aware of what you are sensing and feeling in moment without interpretation or judgment with kindheartedness to relax your body and reduce the stress level.<sup>7</sup> In addition to mindfulness with spiritual connections also have a good impact on wellbeing to gain comfort and pleasure.<sup>7</sup> One research founded that People adopted different coping strategies to relieve stress that makes them happy. For example some find relief in doing prayers and visit to their prayer places that is 15%, 14% people engaged yourself in sports, Some group made positive relationship with loved ones 14%, 20% do yoga and meditation, 6% person always go on holidays, 13% people have strong bond with their pets, 12% of people do laughter therapy or engaged in that activities in which they can laugh and 6% person feels relieve in maintaining silent so they feel better and relax.<sup>8</sup>

Counseling and psychological therapy session is also most effective coping strategy that can be given to health care workers and their family. Physical exercises and different physical fitness training programs are also helpful in reducing stress and attain the generalized and mental relaxation in individuals. It has direct impact on the performance to release mental pressure.<sup>9</sup> People also uses different appropriate coping techniques in which self-evaluation, self will power, accepting your commitments and fulfill your responsibility, isolation from the situation or maintaining a

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distance from people, move on and plan to solve your problems according to the situations<sup>9</sup>.

Stress among professionals is not much addressed comparatively. This study focused professional of various domains in multidisciplinary field to reveal the stress, their body complains and strategies adopted to cope these stresses and its consequences.

The aim of this study is to find out different adopting strategies that different professionals adopted to relieve stress.

**METHODS AND MATERIAL**

This cross sectional study has been conducted in two centers namely Islam medical and dental college and Jinnah Sindh medical university. The professionals were approached physically by trained researched professional and total 257 forms filled. Questionnaires including set of sociodemographic form, problem description form, major responses for the problem and Brief- Cope outcome measure to access coping mechanisms adopted by professionals.

**Ethical Approval:** Ethical approval has been received from Research and Ethical Committee Reviewboard at Islam Medical and Dental College, Project No 2020-12/PT , IMC/PHARMA/320/0809/2020. Written informed consent was obtained from all the students. Participation in the study was voluntary. Details of the study, including potential benefits, risk and rights to decline participation, were made clear to participants before the study. All questionnaires were stored securely in a locked filing cabinet in a locked room with access restricted to the principle researcher.

**Study population:** By using Open Epi sample size calculator taking confidence interval 97%, relative percentage of adopted coping strategy is<sup>20</sup> 73.28% with margin of error as 6.0%, then the estimated sample size was n=257<sup>20</sup>. Total 257 forms were circulated and 249 participants filled and 7 professional refused due to personal reason. The intended population were professionals of different departments of Islam medical and Dental College (Grand Asian University) and Jinnah Sindh Medical University.

**Study variables:** A non-probability purposive sampling technique was used to recruit the professionals. The questionnaire included demographic information on professionals including gender, age, marital status, family status, job status, salary and qualification. Part II questionnaire was about problem description including recreational activities, frequent traveling and telephone calls, disorganization and so on. Part III questionnaire was about different responses to the problems including abdominal discomfort, raised blood pressure, get annoyed easily, smoking, backache and so on. The English version of the tools was used for data collection since the working environment is culturally diverse and English is both a requirement and common language.

The Brief-COPE is a 28 item self-report questionnaire designed to measure effective and ineffective ways to cope with a stressful life event. The scale can determine someone's primary coping styles with scores on the following three subscale: (1). Problem-Focused Coping (Items 2, 7, 10, 12, 14, 17, 23, 25), (2). Emotion-Focused Coping (Items 5, 9, 13, 15, 18, 20, 21, 22, 24, 26, 27, 28), and (3) Avoidant Coping (Items 1, 3, 4, 6, 8, 11, 16, 19) . Scores are presented for three overarching coping styles as average scores (sum of item scores divided by number of items), indicating the degree to which the respondent has been engaging in that coping style. (1 = I haven't been doing this at all), (2= A little bit), (3 = A medium amount), (4= I've been doing this a lot)

**Data Collection Procedure:** This cross-sectional survey has been conducted in two medical universities in Pakistan. Various departments have been addressed including professional personnel in medical college, dental college, Pharmacy College, college of physiotherapy, nursing institute, college of law, administrative staff and clinical areas within universities were addressed. Trained research personnel physically approached the

professionals working in mentioned department and introduced their selves and intention of study. Data collection was performed from 2<sup>nd</sup> August to 3<sup>rd</sup> November 2019 for Grand Asian University and from 2<sup>nd</sup> February to 4<sup>th</sup> April 2022 December for Jinnah Sindh Medical University. English version of questionnaire was used and each item of was answered on a 4 point scale for Brief Cope and 5 point scale for questionnaire Part II and III.

**Data Analysis:** Data analysis has been done by using IBM-SPSS version 23.0. Counts with percentages were reported on baseline characteristics of studied samples, Mean with standard deviation were given on brief cope scores on problem, emotion and avoidant coping domains. Descriptive on major caused and problems during stress were reported, association was tested using Pearson Chi Square test and mean scores of brief Cope outcomes were compared using independent sample t-test. P-values less than 0.05 were considered statistically significant. Bar diagrams were also used to give graphical presentation of data.

**RESULTS**

Table-1 reports the baseline characteristics of studied samples, in the present study there were two hundred and fifty six participants. Majority 58.2% were female, 82% with age group 20 -35 years old, 38.7% were married, 47.7% from joint family system, 52.3% were graduated, 83.2% with less than 100,000 PKR income per month, 57.8% with temporary nature of job and 33.2% having intermediate job position.

Table 1: Baseline Characteristics of Studied Samples (n=256)

Characteristics of Participants		n	%
Gender	Male	107	41.8
	Female	149	58.2
Age	20- 35 years	210	82.0
	36-50 years	38	14.8
	51-70 years	8	3.1
Marital status.	Married	99	38.7
	Unmarried	154	60.2
	Separated/ widowed.	3	1.2
Family status	Joint family	122	47.7
	Nuclear family	134	52.3
Educational qualification	Graduation	134	52.3
	Post-graduation	110	43.0
	PhD	12	4.7
Salary per month (PKR)	< 100,000	213	83.2
	100,000 - 200,000	24	9.4
	200001- 300,000	15	5.9
	>300,000	4	1.6
Nature of Employment	Permanent.	103	40.2
	Temporary	148	57.8
	Visiting	5	2.0
Job position	Senior or executive-level (set policies and procedures)	38	14.8
	Mid-level (Managerial roles within their company and ensure the day-to-day operations of an organization are running smoothly.)	59	23.0
	Intermediate (After gaining a few years of experience in a specific field.)	85	33.2
	Entry-level (When you first join the workforce, you will likely start in an entry-level position.)	74	28.9

Table-2 reports the descriptive on major causes of stress were reported by the respondents, results showed 32% said rarely for no recreational activity, 36.3% for frequent travelling, 14.5% for working on holidays, 22.7% for complications from children, 23.8% for disorganization or misfiring of system, and 11.3% for inadequate support from family, 27.7% for improper mental and physical health status, 19.5% for lack of team work among employees, 37.9% for incapable to cope with inadaptability of institutional policies and procedures, 10.9% for prolonged duty hours, 28.5% for frequent telephonic calls, 28.5% for delayed salary payment (deduction), 30.9% for lack of appreciation from boss and 15.6% for irrelevant tasks.

Table-3 reports the descriptive on major responses for the problem, there were 23.8% respondents said rarely for abdominal pain, 30.1% for unable to express their feeling with their social circle, 16.8% for usually get annoyed with everyone, 17.6% for raised blood pressure, 23.8% for usually feel stressed, 8.2% for

smoking, 19.5% for getting disappointed about their achievements, 19.1% for hyper ventilation, 12.5% for high blood sugar level, 16% for lumbago, 19.5% for tension myalgia, 18.8% for use of liquors, 23.8% for sleep disturbances, 34.4% for unable to recall things and 24.2% for unable to focus on their job related tasks.

Table 2: Descriptive Statistics on Major causes of stress

Problem Description	Never%	Rarely%	Sometimes%	Very Often%	Always%
No recreational activity	55(21.5)	82(32)	88(34.4)	20(7.8)	11(4.3)
Frequent travelling	58(22.7)	93(36.3)	53(20.7)	42(16.4)	10(3.9)
Working on holidays	71(27.7)	37(14.5)	92(35.9)	34(13.3)	22(8.6)
Complications from children	91(35.7)	58(22.7)	33(12.9)	38(14.9)	35(13.7)
Disorganization / misfiring of system	92(35.9)	61(23.8)	52(20.3)	33(12.9)	18(7)
Inadequate support from family	95(37.1)	29(11.3)	88(34.4)	18(7)	26(10.2)
Improper mental and physical health status	78(30.5)	71(27.7)	66(25.8)	31(12.1)	10(3.9)
Lack of team work among employees	118(46.1)	50(19.5)	44(17.2)	35(13.7)	9(3.5)
Incapable to cope with/inadaptability of institutional policies and procedures	67(26.2)	97(37.9)	65(25.4)	16(6.3)	11(4.3)
Prolonged duty hours	92(35.9)	28(10.9)	78(30.5)	35(13.7)	23(9)
Frequent telephonic calls	84(32.8)	73(28.5)	59(23)	20(7.8)	20(7.8)
Delayed salary payment (Deduction)	73(28.5)	73(28.5)	54(21.1)	18(7)	38(14.8)
Lack of appreciation from Boss	79(30.9)	79(30.9)	70(27.3)	10(3.9)	18(7)
Irrelevant Tasks	100(39.1)	40(15.6)	87(34)	20(7.8)	9(3.5)

Table 3: Major Responses for the problems.

Particulars	Never%	Rarely%	Sometimes%	Very Often%	Always%
Abdominal problems	96(37.5)	61(23.8)	67(26.2)	19(7.4)	13(5.1)
Unable to express my feelings with my social Circle	70(27.3)	77(30.1)	64(25)	30(11.7)	15(5.9)
I usually get annoyed with everyone	101(39.5)	43(16.8)	75(29.3)	27(10.5)	10(3.9)
Raised blood pressure/Blood pressure changes or alterations	133(52)	45(17.6)	50(19.5)	19(7.4)	9(3.5)
I usually feel stressed and rejected	98(38.3)	61(23.8)	72(28.1)	12(4.7)	13(5.1)
Smoking	200(78.1)	21(8.2)	16(6.3)	14(5.5)	5(2)
I get disappointed about my achievements	143(55.9)	50(19.5)	36(14.1)	17(6.6)	10(3.9)
Hyper Ventilation/Heavy breathing	165(64.5)	49(19.1)	30(11.7)	9(3.5)	3(1.2)
High blood sugar level	179(69.9)	32(12.5)	36(14.1)	6(2.3)	3(1.2)
Lumbago (Back pain)	102(39.8)	41(16)	49(19.1)	38(14.8)	26(10.2)
Tension Myalgia's (Headache of any type)	95(37.1)	50(19.5)	42(16.4)	22(8.6)	47(18.4)
Use of liquors and sedatives	161(62.9)	48(18.8)	21(8.2)	21(8.2)	5(2)
Sleep disturbances / Unable to sleep well	126(49.2)	61(23.8)	39(15.2)	18(7)	12(4.7)
Unable to recall things and feel disorganized	77(30.1)	88(34.4)	57(22.3)	28(10.9)	6(2.3)
Unable to focus on my job related tasks	120(46.9)	62(24.2)	34(13.3)	26(10.2)	14(5.5)

Fig. 1 reports the association between major causes and problems during stress, results showed there were 64.6% samples found with more than eight major causes of stress and problems during stress and 82.1% with less than or equal to eight major causes and problems during stress. The odd ratio 8.34 with 95% C.I (4.33 – 16.06) showing samples with more causes of stress were found 8.34 times more likely for more problems during stress, the association was found statistically significant (Chi Square 47.23 , p <0.01) .

Table-4 reports the further association of causes and problems during stress with baseline characteristics using Pearson Chi Square test, however the association was statistically insignificant with p>0.05.

Fig. 1: Association between causes and problems during stress

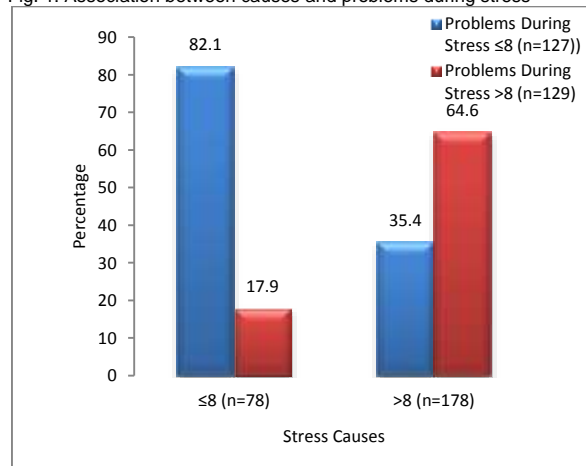


Table 4: Association of Causes and Problems during Stress with Baseline Characteristics

Characteristics	Causes of Stress	Problems during Stress
	Chi Square (p-value)	Chi Square (p-value)
Gender	1.6(0.205)	0.61(0.435)
Age	1.115(0.573)	0.609(0.738)
Marital status.	0.367(0.832)	1.046(0.593)
Family status	1.286(0.257)	0.757(0.384)
Educational qualification	0.193(0.908)	1.348(0.51)
Salary per month	2.407(0.492)	5.881(0.118)
Nature of Employment	0.27(0.874)	0.535(0.765)
Job position	5.018(0.171)	1.108(0.775)

\*p<0.05 was considered statistically significant

Table- 5 reports the mean comparison of Brief Cope scores with causes and problems of stress, samples with more than eight causes of stress were found with less mean values on problem focused, emotion, and avoidant coping domains, however the differences were statistically insignificant, (p>0.05), whereas samples more than eight problems during stress gives a significant mean difference for avoidant coping scores (p<0.01).

Table 5: Mean Comparison of Brief COPE Scores with Causes and Problems during Stress

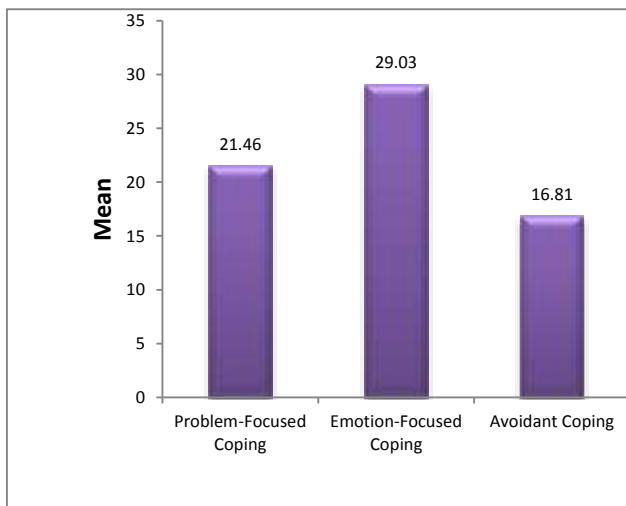
Brief COPE Outcomes	Major Causes of Stress				p-value
	≤8		>8		
	Mean	SD	Mean	SD	
Problem-Focused Coping	22.0	4.7	21.2	6.8	0.37
Emotion-Focused Coping	29.9	12.7	28.7	6.4	0.28
Avoidant Coping	17.2	3.8	16.7	3.7	0.30
Brief COPE Outcomes	Problems During Stress				p-value
	≤8		>8		
	Mean	SD	Mean	SD	
Problem-Focused Coping	21.6	5.5	21.3	6.9	0.67
Emotion-Focused Coping	28.0	7.2	30.0	10.0	0.07
Avoidant Coping	16.0	3.6	17.6	3.7	<0.01*

\*p<0.05 was considered statistically significant using Independent sample t-test

Table 1b: Coping Strategies of Studied Samples

Brief-COPE	Mean	SD
Problem-Focused Coping	21.46	6.23
Emotion-Focused Coping	29.03	8.78
Avoidant Coping	16.81	3.75

Fig. 2: Coping strategies of studied samples



The table 1b showing the mean scores on coping strategies of studied samples, the mean score for Problem Focused coping was 21.46 (SD=±6.23), for Emotion Focused coping was 29.03 (SD=±8.78) and for Avoidant coping was 16.81 (SD=±3.75). Higher score on Emotion focused coping showing increased utilization of this coping strategy by samples, after that they were focusing on problem focused and then avoidant coping strategy was using commonly by samples.

**DISCUSSION**

The main objective of this cross sectional study is to identify the coping mechanisms adopted by professionals for stress management and its association with different problems in their professional and personal life. Results of this cross sectional study indicated the highest utilization of emotion focused coping followed by problem solving and avoidant copying strategies. This is consistent with the previous study findings conducted on professionals working in pediatrics units including intensive care<sup>10</sup> and novice nurses who commonly demonstrate emotion-focused coping behavior to deal with their stressors<sup>4</sup>.

Emotion focused coping mechanisms are considered as least effective because of their ineffectiveness in managing the

stress levels despite their immediate temporary relief.<sup>11</sup> Strategy to manage feelings during the stress lack the ability to deal with its root cause of stress so its utilization may negatively influence the mental health of the professionals. This is supported by lower stress level in participants who focus on problem solving and reasoning to deal with their stress<sup>12</sup>.

Another important aspect of our research findings is that the participants who suffer deductions and late salaries are facing the most problems related to stress so they prefer to gain emotional support as identified in a previous research that the professionals having family and relative support experience less stress as compared to others.<sup>13</sup> Avoidant copying is the least preferred behavior adopted in our study which indicates that majority of the participants try to actively confront their stressors rather than disengagement, avoidance or denial as evident in study conducted in Saudi Arabia<sup>14</sup>.

The findings of our study revealed frequent utilization of active coping strategies as compared to passive coping mechanisms. Similar study was conducted in Netherlands to identify the association of different coping mechanisms with the psychological wellbeing of professionals and deduced that strategies involving active control of situation, taking initiatives to confront the stressors can significantly influence the psychological wellbeing whereas behaviors involving denial, avoidance, distractions may lead to adverse outcomes<sup>15</sup>.

Coping mechanisms are also influenced by age, gender, and working conditions. Professionals with higher workload tend to adopt emotion based coping mechanisms as compared to those having low workload and lower exhaustion levels.<sup>16</sup> Frequent utilization of problem solving strategies may facilitate learning by introducing new ideas and enhance the relevant learning.<sup>16</sup> Considering the demographic variables majority of participants in our study faced problems related to their children which is in contrast to previous literature which reported lower stress in coworkers with children<sup>17</sup>. Female gender is also associated with increase propensity to stress but they utilize more proactive coping strategies as identified in numerous studies including study on teachers inducing distant learning during COVID-19 outbreak<sup>18</sup> and on law enforcement officials which is comparable to our study comprising more female participants<sup>19</sup>.

**Limitations:** The acknowledged limitations of this paper in our intention were using of self-structured sociodemographic questionnaires which may reveals social desired biasness, secondly professionals of multilevel were recruited which may affected the perception of stress, their coping style and response to it as stress differs from profession to profession and level of designation, thirdly convenient sampling has been used which has possibility of inherent biasness and thus generalizability of results and findings would not be admissible to whole population, fourth acknowledged limitation was of language biasness as all questionnaires were English based. All these limitations must be addressed in future studies as this will provide better insights of better coping among professionals. Our findings nonetheless would have laydown better framework for onward researches in the community.

**CONCLUSION**

Based on our findings of research the major population of the study adopted emotional based coping strategies and were actively involved to counterbalance the impact of professional stress followed by problem solving and avoidant coping strategies. Thus the adopted strategies in this are considered least effective in professional, thus the policy makers must address these points under consideration for future planning to ensure potential and valuable outcome from professionals.

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**Conflict of Interest:** None to declare

**Financial Disclosure:** None

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