Original Article

Psychological Sequelae of COVID-19: The Mediating Role of Family Communication as a Protective Factor

Umaiza Bashir, Ayesha Jabeen

ABSTRACT:

Objectives: To assess the mediating role of family communication between the relationship of psychological strengths or sequelae and anxiety symptoms in general population during lockdown in COVID-19 among**.**

Methodology: A cross-sectional research design was used to assess a sample of age range 18 years to 60 years during a period of March 2020- July 2020 after taking Ethical approval by a institutional review board of university. The measures of the study including demographic variables form, indigenous scale for Psychological Strengths and Depression Anxiety Stress Scale (DASS) was used to measure the anxiety in population. The Family Communication scale was used to measure the mediating effect of communication within family members. Using convenient sampling online google form was generate and from 371 participants' data was collected, in which adult general population was included.

Result: The present study showed that there was a significant relationship between the study variables, and family communication indicated partial mediating role between psychological sequelae and anxiety symptoms.

Conclusion: It can be concluded that to better deal with the anxiety related to corona virus disease positive perspective is important and family bonding and communication play significant role in increasing psychological strengths.

KEYWORDS: Psychological Strengths, Corona Virus, Anxiety Symptoms, Family Communication

INTRODUCTION

The Covid-19 pandemic has a great risk of catching the virus, which resulted in a strict lockdown and posed quarantine worldwide.[1] Quarantine living has been devastating around the globe, there is the anxiety of basic survival and whether one can protect themselves.[1]

People are having fear of falling sick, helplessness, and stigma of being a corona virus patient.[2] It showed the general public experiencing a wide range of psychological problems because of this epidemic just like the previous outbreaks of infections.[3]

Umaiza Bashir *MS*
Lecturer Clinical Psychology
School of Professional Psychology
University of Management and Technology, LHR, Pakistan
Ayesha Jabeen *PhD*
Assistant professor Clinical Psychology,
School of Professional Psychology
University of Management and Technology, LHR, Pakistan

Correspondence:
Umaiza Bashir
Email: umaiza.bashir@umt.edu.pk

One study reported that during an influenza outbreak in past, almost 30% of the population reported fear and worried thoughts about contracting the virus.[4] With the closure of schools, markets, and every public activity people are bound to remain at home, which makes individuals experience negative emotions.[5]

More specifically, there is fear of self-isolation associated with depression, anxiety, and stress especially within vulnerable persons.[6] However, most people are resilient even when facing difficult situations like disease outbreaks. Being resilient is one of the psychological adjustment components, although there is a large ratio of reported psychopathology among people who expose to traumatic life events also there are factors that make them psychologically strong to cope and deal with stressful situations. To maintain ongoing mental and physical care, family and interpersonal resources are those factors that can be useful especially in uncertain threats like COVID-19.[7] Almost every individual is quarantine with the family members at home,

that's why it becomes very important to understand the psychological strengths at the family level and know the role of a family communication to decrease adverse effects of psychological sequelae. In the light of strengths and adaptability approach families help to be resilient to disruption in the face of change and adaptive in the face of crises.[8] Better family communication facilitates adjustment and response towards the crises and stress, better clarity of problem, open emotional expression and family warmth are one of the few dimensions which make healthier communication among family members.[9] The current Covid-19 epidemic situation is inducing continuous stress, therefore timely understanding of mental health crisis and protective factors for coping is need of the time. Moreover, according to theoretical models of psychological adjustments, the role of resilience factors like the family may change the perspective of adverse situations. Thus, this study is an attempt for highlighting the importance of paying attention to family communication as a regulatory and modifying strategy to use in response to changing situational anxiety of the corona virus.

METHODOLOGY

The current study used a cross-sectional research design, which consisted of 371 participants of the age range of 18 to 60 years old adult general population. This study was conducted during a period of March 2020- July 2020 in department of clinical psychology, university of management and technology Lahore after taking ethical approval from institutional review board of university. (ref ICPY/20/140)

Data was collected from general Pakistani population using convenient sampling technique. Questionnaire was constructed on Google form. The goggle form link was shared among the participants through personal contacts on what's app. Subjects, who were illiterate and below 18 above 60 years were excluded from the study. Three assessment scales were used including, a 10-item Family Communication Scale, to know about the communication patterns among family members, this scale has shown good reliability (α = 0.90).[10] Indigenous Psychological Strengths scale with strong psychometric properties (α = 0.93) was used to assess positive perspectives and adjustments against covid-19.[11] This scale has 21 items with 3 factors named Revitalization of Self, Family/Relationships Bonding and Religion and Spirituality**.** To measure the Anxiety symptoms of individuals in time of pandemic the subfactor of anxiety containing 7 items on 4-point likert scale (0=did not apply to me at all to (3=applied to me very much or most of the time), was used from Depression, Anxiety, Stress Scale (DASS).[11] The total score of the DASS-21 ranges between 0 and 63.[11,12] This scale also had sound psychometric properties with high reliability in English language (α = 0.93).[12] At the beginning of the questionnaire, a brief statement on consent and confidentiality was given. Questionnaire also include questions regarding demographic variables including age, gender, education, family system, and marital status. There was no question concerning identity of participants to maintain confidentiality. Filling the questionnaire implied permission to be included in the study; so no formal written permission was sought from participants.

SPSS version 22 was used to analyzed the data in which descriptive analysis was used and in inferential statistical analysis Pearson correlation was administered to assess the relationship. Hayes Process analysis was used to see the mediating effect of family communication.

RESULTS

Study was comprised of 371 participants of both gender with mean ± SD of 40.6 ±6.7

Data represented in the table 1 showed that in the study sample female participants were more in number (73%) as compared to males. It also depicted that graduate education level (195) and unmarried participants (302) were more in data. Most of the participants live in a nuclear family system (69%). Most of the participants of the study were in their early adulthood phase. The mean age of participants was 24.7 and standard deviation was 6.7.

The table 2 showed the relationship between the psychological strengths (PS) and family communication to be positively significant (r = 0.53), and the association of PS with anxiety symptoms was identified as negative but weak

(r = -0.15). Whereas, family communication has a significant negative relationship with anxiety symptoms (r = -0.21). These results revealed that the individual with healthy family communication will have less anxiety related to covid-19 and a more positive approach. Mean & SD scores for psychological strengths, family communication and anxiety symptoms were 44.06±11.5137.19±8.17, 4.45±4.23 respectively.

Table 1: Demographic Characteristics Gender, Age Category, Education of the Participants (N=371)

Variables	Population N (%)
Gender	
Male	99(26.7)
Female	272(73.3)
Education	
School and College	27(7.5)
Graduate-level	195(52.6)
Post graduate level	149(40.2)
Marital Status	
Married	69(18.5)
Unmarried	302(81.4)
Family System	
Nuclear	256(69)
Joint	115(31)

f= frequency, %=Percentage

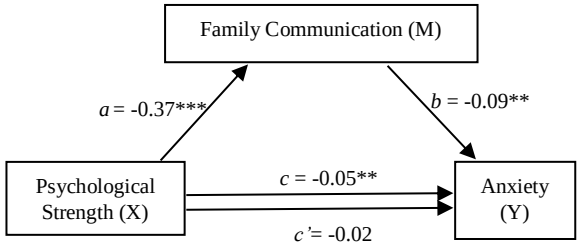
Simple mediation analysis was carried out to find out the mediating role of family communication between psychological strength and anxiety.

Table 2: Inter-correlations between Psychological Strengths, Family Communication and Anxiety Symptoms in General Population (N = 371)

Variables	FC (r)	AS (r)
PS	0.53***	-0.15
FC	-----	-.21**

PS: Psychological Strengths, FC: Family Communication, AS: Anxiety Symptoms, r= Pearson's correlation coefficient, p value ≤0.05, **p < .001***

Figure 1: Simple Mediation Analysis Model



Results of the study indicated that psychological strength was found to be a significant predictor of family communication as a = 0.37, SE = 0.05=3, p < 0.001 and the anxiety was found to be significant predictor of family communication as b = -0.09, SE = 0.03 p < 0.01. The findings of the study revealed that the family communication was found to be fully mediating the association of psychological strength and anxiety as the c' model indicated b = -0.02, SE = 0.02, p>0.05. The mediation effect of family communication was found to be non-significant which depicted the full mediation of the model while the values of c were b = -0.05, SE = 0.01, p < 0.01. The results of mediation analysis highlighted the role of family communication as a full mediator of the model while controlling the direct effect which supported the mediational hypothesis.

Table3: Role of Family Communication as a Mediator Psychological Strengths and Anxiety (N=371)

		Consequent						
		M(FC)				Y(Anxiety)		
Antecedent		*β*	*SE*	*p*		*β*	*SE*	*P*
PS (X)	*a*	0.37	0.03	0.001 ***	*c*	-0.02	0.02	0.32
Family Com. (M)		---	---	---	*b*	-0.09	0.03	0.003**
		R^2=0.28				R^2=0.04		
		F(1,369)=144.75, p=.001***				F(2,368)=9.04, p=.001***		

PS= Psychological Strengths, Family Com= Family Communication, *β* = Beta, SE=standard error, p>0.05, ***p* <0.01, ****p* <0.001

DISCUSSION

A plethora of literature concerning psychological and social risk factors exacerbating the physical impact of COVID symptoms also raised the attention of researchers towards finding the protective factors that could mitigate the disease effects. Numerous factors played their role to rescue people from the devastating corona impacts; two among them were psychological strengths and family communication included in the present study.[13] Apprehensions, fear, anxiety, and stress raised by the pandemic stirred hope, bravery, and resilience of many. The psychologically resilient individuals can face adversity of the situation in an adaptive manner.[14] However, certain factors like poor family relations and maladaptive communication may

setback even robust individuals. Current study's results revealed that positive family communication reduce anxiety symptoms during the pandemic. These results are also supported by the previous studies which ruled out that effective communication fosters understanding, coping, and feelings of support from around and therefore mitigates the psychological uproar stemming from pandemic uncertainties. The increase of work from home demand, and imposed lockdown enforced the time together thus providing families with interference opportunities, negative emotional experiences, and shadowing the constructive communication chances.[15] This not only increased the magnitude of interfamilial relational turbulence but also left a negative perception about togetherness. Previous literature has shown that stress and especially COVID-19 fear and stress effect the mental health of an individual, This negativity weakens the psychological immunity and raises the vulnerability of experiencing anxiousness in the prevailed situation of adversity.[16] In contrast, effective communication that entails warmth, love, understanding, expression of positivity, and productive control of emotions and behaviors promote wellbeing and solidify the roots of psychological strength and resilience.[14] these same results are also depicted by the current study. Such individuals utilize intra-individual and interpersonal capacities to face general and specific life upheavals.

CONCLUSION

The study has revealed the mediating role of family communication between psychological strengths and anxiety suggesting that interplay of personal and social factors provides resources for a physical and psychologically strained battle field.

REFERENCES

1. Rehman R, Jawed S, Ali R, Noreen K, Baig M, Baig J. Covid-19 pandemic awareness, attitudes, and practices among the pakistani general public. front public health. 2021; 9:588537. doi: 10.3389/fpubh.2021.588537.
2. Smith LG, Gibson S. Social Psychological Theory and research on the novel Coronavirus Disease (Covid-19) pandemic: Introduction to the rapid response special section. BR J soc psychol.2020;59(3):571–583. doi: 10.1111/bjso. 12402.
3. Simione L, Gnagnarella C. Differences between health workers and general population in risk perception, behaviors, and psychological distress related to covid-19 spread in Italy. front psychol. 2020;11:2166. doi: 10.3389/fpsyg.2020.02166
4. Horesh D, Brown AD. Traumatic stress in the age of covid-19: A call to close critical gaps and adapt to new realities. Psychol Trauma. 2020;12(4):331–335. DOI: 10.1037/TRA0000592
5. Yamaguchi K, Takebayashi Y, Miyamae M, Komazawa A, Yokoyama C, Ito M. Role of focusing on the positive side during COVID-19 outbreak: Mental Health Perspective from positive psychology. Psychol Trauma. 2020;12(S1):S49-S50. DOI: 10.1037/TRA0000807
6. PeConga EK, Gauthier GM, Holloway A, Walker RS, Rosencrans PL, Zoellner LA, et al. Resilience is spreading: Mental health within the COVID-19 pandemic. Psychol Trauma.2020;12(S1):S47-S48. http://dx.doi.org/10.1037/tra0000874
7. Chen S, Bonanno GA. Psychological adjustment during the global outbreak of covid-19: A resilience perspective. Psychol Trauma: Theory, Research, Practice, and Policy. 2020;12(S1): S51-S54.DOI:10.1037/TRA0000685. http://dx.doi.org/10.1037/tra0000685
8. Lassri D, Desatnik A. Losing and regaining reflective functioning in the times of COVID-19: Clinical risks and opportunities from a mentalizing approach. Psychol Trauma**:** Theory, Research, Practice, and Policy.2020;12(S1): S38-S40. http://dx.doi.org/10.1037/tra0000760
9. Mancini AD. Heterogeneous mental health consequences of COVID-19: Costs and benefits. Psychol Trauma**:** Theory, Research, Practice, and Policy. 2020;12(S1): S15-S16. http://dx.doi.org/10.1037/tra0000894
10. Villarreal-Zegarra D, Paz-Jesús A. A Family Cohesion, Adaptability and Composition in Adolescents from Callao, Peru. Propósitos y Representaciones.2017;5(2):21-64. http:// dx.doi.org/10.20511/pyr2017.v5n2.158
11. lovibond pf, lovibond sh. the structure of negative emotional states: comparison of the depression anxiety stress scales (dass) with the beck depression and anxiety inventories. behaviour research and therapy.1995 ;33(3):335-343**.**
12. Ali AM, Hori H, Kim Y, Kunugi H. The Depression Anxiety Stress Scale 8-Items Expresses Robust Psychometric Properties as an Ideal Shorter Version of the Depression Anxiety Stress Scale 21 Among Healthy Respondents From Three Continents. Front Psychol. 2022; 13:799769. Doi: 10.3389/fpsyg.2022.799769
13. Theiss JA. Family Communication and resilience. Journal of Applied Communication Research. 2018;46(1):10–3. 10.1080/00909882.2018.1426706
14. Knoster K, Howard HA, Goodboy AK, Dillow MR. Spousal interference and relational turbulence during the COVID-19 pandemic. Communication Research Reports. 2020;37(5): 254–262. https://doi.org/10.1080/08824096.2020.1841621
15. Monk JK, Ogolsky BG. Contextual relational uncertainty model: Understanding ambiguity in a changing sociopolitical context of marriage. Journal of Family Theory & Review. 2019;11(2):243–261. https://doi.org/10.1111/jftr.12325
16. Hernandez RA, Colaner C. "This is not the Hill to die on. Even if we literally could die on this hill": Examining communication ecologies of uncertainty and family communication about covid-19. American Behavioral Scientist.2021;65(7):956–975. https://doi.org/10.1177/002764 2219.

Authors' Contribution	
Umaiza Bashir	Study design and concept, the acquisition, analysis, or interpretation of data for the work; drafting the manuscript revising critically for important intellectual content.
Ayesha Jabeen	Study design and concept, data collection and analysis, or interpretation of data, manuscript writing, revise and approve the manuscript.
	All authors are equally accountable for accuracy, integrity of all aspects of the research work and approved the manuscript

Date of Submission: 03-03-2022
Revised: 04-12-2022
Accepted: 09-12-2022