

DIFFERENCE OF PRESENTATION GENERALIZED ANXIETY DISORDER BETWEEN RURAL AND URBAN POPULATION

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ABSTRACT

Background: Generalized Anxiety is the most pervasive reason for illness trouble in the normal populace. Because of quick monetary and social changes, the same expanding pattern of these issues has additionally been seen in Pakistan.**Objective:** To compare the level of generalized anxiety disorder between the rural and urban population of Sindh, Pakistan. **Design:** Cross-sectional, prospective hospital-based study **Place & duration:** This research was performed in the Department of Psychiatry Liaquat Medical University Jamshoro and Sir Cowasji Jehangir Institute of Psychiatry, Hyderabad for 1 year from the 15th of June 2019 to the 14th of July 2020.**Material and Methods:** A total of 200 participants were included. 100 were rural residents and 100 were urban residents of Sindh. Respondents were conducted and the answers to Generalized Anxiety Disorder 21 were graded (DASS). The data were evaluated with frequency, mean and standard deviation. **Results:** The mean age of study participants was 31.46±9 years and 34.75±9.98 years in the urban and rural populations, respectively. There was no significant difference at $p \geq 0.05$ between total scores of GAD among rural and urban participants. **Conclusion:** This research showed no difference between rural and urban communities in Generalized Anxiety Disorder.

Keywords. Generalized Anxiety Disorder, Rural and Urban Population, Quality Of Life

How to cite this article: Laghari DK¹, Ansari M², Kumar E³, Rashid S⁴, Rashid KH⁵, Bhatia MR⁶.

DIFFERENCE OF PRESENTATION GENERALIZED ANXIETY DISORDER BETWEEN RURAL AND URBAN POPULATION. JPUMHS; 2021;11:01,96-99.

<http://doi.org/10.46536/jpumhs/2021/11.01.299>

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Received on Dec 25, 2020, Accepted On 15 March 2021, Published On 31 March 2021

INTRODUCTION

Anxiety might be a condition of fear, vulnerability, and stress emerging from the expectation of a viable or stunning compromising occasion, normally disabling physical and mental working. Summed up Anxiety problems being generally normal across the world contribute significantly to the worldwide weight of sickness (GBD) and by 2020 they are required to be the second commonest reason for handicap. The element of general uneasiness was initially conceptualized by Freud, who begat the expression "tension hypochondria". This included four significant clinical conditions: general touchiness, ongoing dread, mental episodes and auxiliary phobic avoidance.¹ The meaning of GAD has changed over the long haul and Diagnostic and Statistical Manual of Mental Disorders, fourth Edition (DSM-4) takes diligent concern more than a half year alongside three of the accompanying six indications to be available: anxiety, fatigability, trouble concentrating, fractiousness, muscle pressure and rest disturbance.¹ Anticipated early onset of these disorders in life² with their chronic course³ associates them with considerable impairment consequently enhances the need to use primary care services thus leads to economic burden.⁴ These disorders put low-

income countries in a challenging situation where infectious diseases and malnutrition are rife and the general population can only allocate a low proportion of gross domestic product to health care services.⁵ Even developed countries like the United States could not exempt themselves from bearing the economic consequences that anxiety disorders pose. The estimated annual cost of anxiety disorders was reported to be forty-two billion dollars in 1999.⁶ Some of the symptoms of depression are excessive or decreased appetite, sleep and psychomotor activity, anhedonia, and fatigue.⁷ Gender issues, employment problems, family setup, social status, and social support influence mental wellbeing. In depressive disorder family and social support provides a buffer against it, in contrast, economic problems and family conflicts aggravate depression.⁸ As far as anyone is concerned this is the principal concentrate from Pakistan that actions the predominance gauge of uneasiness utilizing an approved instrument. In Pakistan, the mean in general pervasiveness of tension and discouragement dependent on local area tests is 33.62%, with a point commonness of 45.5 % in ladies and 21.7% in men.¹ Additional associated risk factors among adolescents were identified as female sex,⁹ low parental education,¹⁰ and weak

inter-parental relationship.¹⁰ Some reviews on rural-urban differences for psychiatric disorders show urbanization as a risk factor while others contradict this concept.¹¹ Sindh, the province of Pakistan has many districts among which two are designated for urban development and other three for rural development. Sindh is well developed in health care facilities and its rural population can conveniently approach these facilities in contrast to other deprived rural areas of Pakistan. Considering this, the present study aims to explore rural-urban differences in the prevalence of generalized anxiety in Sindh.¹² The objective of the study was to compare the prevalence of anxiety in rural and urban population of Sindh, Pakistan.

MATERIALS AND METHODS

This prospective, hospital-based research was performed in the Department of Psychiatry Liaquat Medical University Jamshoro and Sir Cowasji Jehangir Institute of Psychiatry, Hyderabad for 1 year from the 15th of June 2019 to the 14th of July 2020. Patients either male and female with age 18 to 65 years were included in this study while those patients who were going

to focus on GAD in the adult population, cases below the age of 18 & above 65 years were not included in this study. Sample from the Urban population was taken from sectors of G-6, G-9, and G-10. A random sampling technique was used for data collection. A tool used for data collection was the Anxiety, and stress scale ver. 21 (DASS 21) which is a reliable measure for the adult population. 17 Ranges for DASS 21 score distribution are mentioned in Table 1. To meet inclusion criteria, participants' having literacy level of matriculation or above was taken in this study to ensure comprehension of study scales for self-administration. Participants' age range was 20-55 years that refers to young and middle adulthood. Scales were self-administered after ensuring consent from study participants

Statistical Analysis:

Data analysis was done using SPSS version 21 and included frequencies and percentages for categorical variables and Mean±SD for continuous variables. Differences across study groups were measured by using an independent sample t-test.

Table 1: Score Range Severity of Anxiety	
The severity of anxiety	Score
Normal	0-7
Mild	8-9
Moderate	10-14
Severe	15-19
Extremely Severe	20+

RESULTS:

In the current study total participants were n=386, n= 193 participants were from the urban population and the remaining n=193 were from the rural population. The mean age of study participants in the urban population was 31.46±9 and 34.75±9.98 in the rural population respectively. The total number of male participants was n=177(45.9%) out of that n=111(57.5%) were from the urban population and the remaining n=66(34.2%) were from the rural population. Total female participants in the study were n=209(54.2%), out of that n=82(42.5%) were from the urban population and n=127(65.8%) were from the rural population. Results showed that n=156(70.8%) urban and n=150(77.7%) rural population of Islamabad was found

depressed. The frequency of anxiety was found n=172(90.2%) in the urban and rural populations equally. A total of n=119 (52.6%) from the urban population and n=111(47.5%) from the rural population were found stressed. The frequency distribution of study participants according to the severity of anxiety in rural and urban population is shown in table 2. No significant differences (p≥0.05) were found between scores of rural and urban participants across all items of depression, anxiety, and stress, except item 4 was about 'experiencing breathing difficulty without any physical exertion related to anxiety' showed a significantly greater score (p=0.04) in the Urban population (1.24±0.88) as compared to rural population (1.02±0.87). (Table 3)

Table 2: Frequency distribution, anxiety in rural and urban population		
Severity of anxiety	Urban	Rural
Normal	19(9.8%)	19(9.8%)
Mild	23(11.9%)	37(19.2%)
Moderate	34(17.6%)	44(22.8%)
Severe	25(13%)	20(10.4%)
Extremely Severe	92(47.7%)	73(37.8%)

p≥0.05 is statistically insignificant calculated by the test of Chi-square

Table 3: Comparison of anxiety between Rural & Urban population

	Area	N	Mean	SD	P-value
I found it hard to wind down	Urban	193	.78	.813	.388
	Rural	193	.86	.950	
I was aware of dryness of my mouth	Urban	193	1.24	1.074	.774
	Rural	193	1.21	1.052	
I couldn't seem to experience any positive feeling at all	Urban	193	1.27	.963	.353
	Rural	193	1.37	1.111	
I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	Urban	193	1.24	.888	.014
	Rural	193	1.02	.878	
I found it difficult to work up the initiative to do things	Urban	193	1.22	.917	.957
	Rural	193	1.23	.979	
I tended to over-react to situations	Urban	193	1.49	.974	.201
	Rural	193	1.36	1.011	
I experienced trembling (eg, in the hands)	Urban	193	1.08	.929	.107
	Rural	193	.92	1.022	
I felt that I was using a lot of nervous energy	Urban	193	1.55	1.050	.102
	Rural	193	1.38	.998	
I was worried about situations in which I might panic and make a fool of myself	Urban	193	1.28	.954	.561
	Rural	193	1.22	.972	
I felt that I had nothing to look forward to	Urban	193	1.07	.930	.054
	Rural	193	.88	.964	
I found myself getting agitated	Urban	193	1.20	.944	.089
	Rural	193	1.04	.906	
I found it difficult to relax	Urban	193	1.35	1.026	.337
	Rural	193	1.25	.986	
I felt down-hearted and blue	Urban	193	1.12	.942	.224
	Rural	193	1.00	.979	
I was intolerant of anything that kept me from getting on with what I was doing	Urban	193	1.42	.845	.635
	Rural	193	1.38	.871	
I felt I was close to panic	Urban	193	1.35	.958	.055
	Rural	193	1.16	1.000	
I was unable to become enthusiastic about anything	Urban	193	1.16	.896	.121
	Rural	193	1.02	.938	
I felt I wasn't worth much as a person	Urban	193	1.17	.932	.084
	Rural	193	.99	1.008	
I felt that I was rather touchy	Urban	193	1.12	.887	.457
	Rural	193	1.20	1.022	
I was aware of the action of my heart in the absence of physical exertion(eg, sense of heart rate increase, heart missing a beat)	Urban	193	1.29	.924	.153
	Rural	193	1.43	.993	
I felt scared without any good reason	Urban	193	1.19	.924	.706
	Rural	193	1.23	.963	
I felt that life was meaningless	Urban	193	1.21	1.089	.023
	Rural	193	.96	1.007	
Depression score	Urban	193	8.24	3.856	.102
	Rural	193	7.60	3.845	
Anxiety score	Urban	193	8.69	3.695	.241
	Rural	193	8.24	3.842	
Stress score	Urban	193	8.92	3.171	.128
	Rural	193	8.40	3.490	

DISCUSSION:

In this study, more sum participants were rated on moderate to extremely severe depression and anxiety. In comparison to the rural population, more participants in the urban population experienced moderate, severe, and extremely severe depression. Data from the Canadian community survey explored more deprivation in the urban population due to adverse living conditions which consequently showed increased rates of depression and anxiety in

them.¹⁸ In a meta-analytic study conducted to find urban-rural differences in the prevalence of psychiatric disorders published since 1985, it was exhibited that pooled total prevalence was significantly higher in urban population as compared to rural population for psychiatric disorders.¹¹ In another study conducted in the US no significant association was seen between urbanity and prevalence of depression. In this study, no significant differences were found in adults of large metropolitan and rural areas. This

study concluded that the prevalence of mental disorders is not subject to urbanity suggesting that consideration of mechanistic explanations as risk factors of psychiatric illness in the urban environment is still immature.¹³ In another study conducted on the US population, contrary to expectation, the prevalence of most psychiatric disorders was similar across the rural-urban continuum which concluded rurality as not being a risk factor for any psychiatric disorder or trauma exposure.¹⁴ Few studies link Urbanization as a risk factor for mental disorders and on the contrary, literature also reveals a high prevalence of major depressive disorders in rural areas.¹⁵ Prevalence of anxiety disorders was reported to be 18% in US 1 and in European Union, more than sixty million people get affected per year.¹⁶ GBD study projected that Disability-Adjusted Life Years (DALYs) was around 26.8 million due to anxiety disorders.¹⁷ For the past few decades anxiety disorders are getting increased attention globally for research purposes due to greater recognition of -burden they cause and their associated implications with.

CONCLUSION: The study found no difference between rural and urban communities in Generalized Anxiety Disorder. Patterns of use of medical treatment found with GAD underline the value of treatments that are successful for the control of insomnia and somatic distress symptoms. These findings have ramifications for Sindh's health care policy. And it can be applied to GAD for methods for improved identification and treatment of MD.

ETHICS APPROVAL: The ERC gave ethical review approval **CONSENT TO PARTICIPATE:** written and verbal consent was taken from subjects and next of kin

FUNDING: nil. **ACKNOWLEDGEMENTS:** We would like to thank the all contributors and staff and other persons for providing useful information. **AUTHORS' CONTRIBUTIONS:** All authors read and approved the final manuscript. **CONFLICT OF INTEREST:** No competing interest declared.

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