ORIGINAL ARTICLE

PSYCHOLOGICAL WELL-BEING IN ADULTS WITH AND WITHOUT ASTHMA

RIFFAT SADIQ¹, HUMA JAVED², HIFZA JABEEN³, URWAH KHAN⁴, FIZZA FAREED⁵, FARIHA ASHIQ ALI⁶, KAINAT SAKHAWAT⁷, AMNA TARIQ⁸, ANEETA UMAR⁹

¹Assistant Professor, Department of Applied Psychology, GC Women University Faisalabad, ²Lecturer, Department of Applied Psychology, GC Women University Faisalabad, ³⁻⁹BS Student, Department of Applied Psychology, GC Women University Faisalabad.

CORRESPONDENCE: DR. RIFFAT SADIQ

E-mail: drriffat.haider@gcwuf.edu.pk

Submitted: 4 June 2021 Accepted: 18 January 2022

ABSTRACT

OBJECTIVES

To analyze the psychological well-being of adults diagnosed with asthma in comparison to adults without asthma.

STUDY DESIGN

Comparative research.

PLACE AND DURATION

The present was carried out over the period of six months in Faisalabad.

SUBJECTS AND METHODS

Total 120 participants were recruited for the present study including sixty (n=60) adults diagnosed with asthma and sixty (n=60) without asthma. Data collection was done using demographic information form and Psychological Well-being Scale (42-items). Data were analyzed by computing independent samples t-test through SPSS Version, 22.0.

RESULTS

Statistical analysis depicted a significant difference among adults with and without asthma in relation to environmental mastery (t = -3.59, df = 118, p = 0.000), personal growth (t = -4.40, df= 118, p = .000), positive relations with others (t = -2.59, df = 118, p = .011), purpose in life ((t = -5.46, df = 118, p = .000), self-acceptance (t = -2.26, df = 118, p = 0.025) and psychological well-being (t = -4.932, df = 118, p = 0.000). A non-significant difference was found out among adults on the variable of autonomy (t = -1.42, df = 118, p = 0.156).

CONCLUSION

Psychological well-being of adults is significantly influenced by asthma in terms of environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance.

KEY WORDS

Psychological well-being, Asthma, Patients.

INTRODUCTION

A condition of difficulties in breathing is commonly known as Asthma. It is a chronic ailment that is characterized by the attack of breathlessness and wheezing. During an asthma attack, airway becomes narrow owing to the swelled lining of bronchial tubes that result in narrowness of airways and reduction of airflow in and out of the lungs.¹ Symptoms of asthma may vary in intensity and frequency among individuals. Asthma is continuous source of tension in patients. Asthmatic patients endure excessive burden affecting their physical, emotional and social functioning as well.²

Previous literature has shown the robust association of asthma with the range of mental disorders.³ Although, asthma is the problem of physical nature but it causes mental health issues like anxiety and depression.⁴ Asthmatic patients are more likely to have poor quality of life in the domains of physical/mental health and work.⁵ Diagnosis of asthma intensified the risk of people developing psychological and health issues.⁶ Poor life quality⁷ and psychological distress⁸ were significantly noted in asthmatic patients. Asthmatic adolescents reported more emotional problems, negative behaviors but less well-being.⁹

Taking into account the significant impact of asthma on psychological health of patients, the present study will assess the psychological well-being of asthmatic patients. Thus, it has been postulated that adults with and without asthma will significantly differ in respect to psychological well-being (autonomy, environmental mastery, personal growth, positive relation with others, purpose in life and self-acceptance).

SUBJECTS AND METHODS

Participants

Total one hundred and twenty adults (n=120) participated in the present study. Among them sixty (n=60) adults diagnosed with asthma were selected from the hospital and clinics situated in Faisalabad city using convenient sampling method, inclusion criterion was at least 1 year of symptoms, whereas sixty (n=60) normal adults were selected from general population in order to compare them with asthmatic patients. The ages of entire sample ranged from 21 to 50 years. Patients with co-morbid problems were excluded from the study. Besides, adults with other physical chronic

Journal of Pakistan Psychiatric Society

ailments were not selected in order to control their influence on psychological well-being.

Instruments

Personal/demographic information of all participants was recorded using personal information sheet. Additional information pertaining to disease was taken from the patients diagnosed with asthma. Forty-two items Psychological Well-being (PWB-42)¹⁰ was used to examine the psychological well-being of participants. It has 6 subscales naming autonomy, environmental mastery, personal growth, positive relations with other, purpose in life and self-acceptance. The 6 point likert scale is available for scoring all items of PWB-42. Cronbach alpha of the Urdu Version of full scale of PWB-42 ($\alpha = 0.82$) and of the subscale of autonomy ($\alpha = 0.71$), environmental mastery ($\alpha = 0.74$), personal growth (α =0.83), positive relations with other (α = 0.73), purpose in life ($\alpha = 0.79$) and self-acceptance ($\alpha = 0.86$) is satisfactory. Urdu version also has depicted good validity $(r = 0.71).^{11}$

Procedure

Data from asthmatic patients were collected in hospital/clinical setting where these patients were registered for medical treatment. On the other hand, data from normal adults was taken in home/work setting. First, they were informed regarding the purpose and procedure of present study and then their consent was taken to be the part of this scientific work. All participants reviewed the instructions and then answered each item accordingly. Afterwards, statistical analysis of the data was done with SPSS Version, 22.0 by computing descriptive statistics (frequency/percentages), Shapiro-Wilk normality test and independent samples t-test.

RESULTS

Results obtained through descriptive statistics depicted that majority asthmatic patients (48.3%) were between 31 to 40 years of age, while majority (55%) normal adults were falling in the age range of 21 to 30 years. About 61.6% females were with the problem of asthma and 55% females were without asthma. About 48.3% asthmatic patients were having graduate degree and 30% normal adults had intermediate degree. About 75% asthmatic patients were

Table 3

Summary of Independent samples t-test.

Table 1

Demographic characteristics of the participants (n=120).

Characteristics	Adults with Asthma (n = 60)		Adults without Asthma (n = 60)	
Ages Ranges	f	%	f	%
21-30 years	18	30	33	55
31-40 years	29	48.3*	20	33.3
41-50 years	13	21.6	07	11.6
Gender				
Males	23	38.3	27	45
Females	37	61.6	33	55
Education				
Matriculate	11	18.3	04	6.6
Intermediate	15	25	18	30
Graduate	29	48.3	17	28.3
Masters	05	8.3	21	35
Marital status				
Single	15	25	20	33.3
Married	45	75	40	66.6
Duration of Asthma				
1-5	11	18.3	Х	Х
6-10	17	28.3	Х	Х
11-15	24	40	Х	Х
16-20	05	8.3	Х	Х
Above 20	03	5	Х	Х

Table 2

Summary of normality test.

Variable	Shapiro-Wilk Statistics	df	p-value
Psychological Well-being	0.988	120	0.365

married and 40% normal adults were married. Duration of asthma of majority of the participants (40%) was between 11 to 15 years (see Table 1 for details).

Normality test using Shapiro-Wilk Statistics revealed the normal distribution of the present research data (p = 0.365). Therefore, parametric test, independent samples t-test was computed to test the hypothesis (Table 2).

Independent samples t-test depicted a significant difference among adults with and without asthma in relation to environmental mastery (t = -1.42, df = 118, p = 0.000), personal growth (t = -4.40, df = 118, p = .000), positive relations with others (t = -2.59, df = 118, p = .011), purpose in life (t = -5.46, df = 118, p = .000), self-acceptance (t = -2.26,

Variables	Adults with Asthma (n=60)		Adults without	Adults without Asthma (n= 60)			
	М	SD	М	SD	df	t	р
Autonomy	27.70	7.12194	29.53	6.92690	118	-1.42	0.156
Environmental mastery	24.83	6.26036	29.23	7.13399		-3.59	.000
Personal growth	23.76	5.76479	28.78	6.68693		-4.40	.000
Positive relations with others	26.66	4.91855	29.0	4.92658		-2.59	.011
Purpose in life	24.15	5.13157	30.35	7.13508		-5.46	.000
Self-acceptance	29.93	9.55957	33.40	6.98716		-2.26	.025
Psychological well-being	157.05	26.57029	180.30	25.05269		-4.932	.000

Journal of Pakistan Psychiatric Society

df = 118, p = -0.025) and overall psychological well-being (t = -4.932, df = 118, p = -4.932). A non-significant difference was found out among adults on the variable of autonomy (t = -1.42, df = 118, p = 0.156).

DISCUSSION

The objective of the present study was to analyze the psychological well-being of adults with and without asthma. It was found out that adults diagnosed with asthma have less psychological well-being in terms of environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance as compared with adults without asthma.

Due to asthmatic conditions, patients probably feel not to be capable enough to have physical and mental control over the related environment. They might feel difficulty in managing daily activities and were overwhelmed by environmental events/tasks. Previous studies also documented asthmatic patients with less self-efficacy and less mastery.¹² In comparison to healthy adults, asthmatic patients might experience more distress that impeded their personal growth; resultantly they were less likely to try out new things. It seems that asthmatic patients tolerate the symptoms perceiving as the part of their illness.¹³ The time comes when they learn to live with their disease and do not desire to move forward. On the other hand, adults without asthma, being free from chronic illness, feel more energetic to face new situations and learn more.

Asthmatic patients could not develop meaningful bond with others. In other words, they could not get benefit fully from their relationship as adults without asthma could get. Their health condition seemed to enervate their ability to relate with external world. In this regard, a previous research also revealed the poor relationships with peers among asthmatic patients.¹⁴ In a survey, asthmatic patients reported disturbed relationships with family, significant others and friends as well.¹⁵ Furthermore, the problem of asthma is a barrier in achieving life goals that diminishes their interest in making their life meaningful. Asthmatic patients are less productive,¹⁵ have less interest in work and exhibited lack of meaning in life.¹⁶

Failure to accept self worth and appraise the self is another debilitating impact of asthma. The present health condition of asthmatic patients did not let them feel better regarding own self. In a previous study, researchers noted significant self-stigma and disturbed self-esteem among asthmatic patients.¹⁷ Despite that, adults with and without asthma of the present study did not significantly differ in respect to autonomy. Even asthmatic patients, like their healthy counterparts, felt independence of self and did not perceive any pressure in their surroundings. While previously discussing it, researchers¹⁸ suggested the concept of autonomy as broader rather than conventional one, thus, it

must be examined in the wide range of situations the asthmatic patients encounter with.

CONCLUSION

The present findings conclude that the psychological wellbeing of adults was largely influenced by the chronic illness of asthma they suffered from. Consequently, they are far behind in the domains of environmental mastery, personal growth, purpose in life, positive relations with others and self-acceptance than their healthy counterparts.

LIMITATIONS AND RECOMMENDATIONS

The present study recruited asthmatic patients irrespective of its types and forms. Severity of illness, although has immense significance, was not analyzed determining psychological well-being of adults with asthma. In future, while addressing the mental health of asthmatic patients, researchers must pay a scientific glance on the types and level of asthma along with other possible contributing factors such as demographics and personality characteristics, etc.

REFERENCES

- 1. WHO. Asthma. 2020. URL: https://www.who.int/newsroom/fact-sheets/detail/asthma
- McDonald VM, Hiles SA, Jones KA, Clark VL, Yorke J. Healthrelated quality of life burden in severe asthma. Medical Journal of Australia. 2018; 209 (2): S28-S33. || doi: 10.5694/mja18.00207
- Goodwin RD, Jacobi F, Thefeld W. Mental disorders and asthma in the community. Archives of General Psychiatry. 2003; 60(11):1125–1130.doi: 10.1001/archpsyc.60.11.1125
- Nascimento I, Nardi AE, Valenca AM, Lopes FL, Mezzasalma MA, Nascentes R, Zin WA. Psychiatric disorders in asthmatic outpatients. Psychiatry Research. 2002;110:73–80. doi: 10.1016/s0165-1781(02)00029-x.
- Yilmaz A, Cumurcu BE, Etikan I, Hasbek, E.The effect of personality disorders on asthma severity and quality of life. Iranian Journal of Allergy, Asthma and Immunology. 2014; 13(1): 47-54.
- 6. Su X, Ren Y, Li M, Zhao X, Kong L, Kang, J. Prevalence of comorbidities in asthma and nonasthma patients: a metaanalysis. Medicine. 2016; 95, e3459.
- Altiparmak S, Altiparmak O, Sari HY. Asthma and quality of life in adolescents in Manisa, Turkey. International Journal of Adolescent Medicine and Health. 2011;23(3):217–221.doi: 10.1515/ijamh.2011.047.
- Adam RJ, Wilson DH, Taylor AW, Daly A, d'Espaignet ET, Grande ED, Ruffin RE. Psychological factors and asthma quality of life: a population based study. Thorax 2004; 59:930–935. doi: 10.1136/thx.2003.010256
- 9. Forrest, CB, Starfield, B, Riley, AW, Kang M. The Impact of Asthma on the Health Status of Adolescents. 1997. URL: http://www.pediatrics.org/cgi/ content/full/99/2/e1;
- 10. Ryff, C. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. Journal of Peronality and Social Psychology. 1989; 57: 1069-81.

Journal of Pakistan Psychiatric Society

- 11. Anam A, Sadiq R. Infertility: A risk factor for psychological well-being in women. Rawal Medical Journal. 2018; 43 (4): 725-728.
- 12. Hessilink AE, Penninx BWJH, Schlosser MAG, Wijnhoven HAH, Van de Windt DAWM,Kriegsman DMW, Van Eijk JThM.The role of coping resources and coping style in quality of life of patients with asthma or COPD. Quality of Life Research. 2004;13: 509-518.
- Bided N, Barness N, Griffiths C, Home R. (2018).Understanding patients' perceptions of asthma control: a qualitative study. European Respiratory Journal. 2018; 51:170134651. doi: 10.1183/13993003.01346-2017
- 14. Rhee H, McQuillin B, Chen D-G.Perceptions about interpersonal relationships and school environment among middle school students with asthma. Journal of Asthma. 2017; 54(9). DOI: 10.1080/02770903.2016.1277540.
- 15. Asthma and Allergy Foundation of America. (2017). My Life with Asthma: Survey Overview. URL:https://www.aafa.org
- 16. Kouhbanani FAS, Saber S.Comparison of life anxiety and the meaning of life between asthmatic and diabetic patients. hrjbaq 2019; 4(2): 120-128.
- Ahmad S, Ismail AI, Zim MAM, Ismail NE. Assessment of selfstigma, self-esteem, and asthma control: A preliminary crosssectional study among adult asthmatic patients in Selangor, Malaysia. Frontiers in Public Health Epidemiology.

2020;doi.org/10.3389/fpubh.2019.00420

18. Eassey D, Reddle HK, Ryan K, SmithL. The impact of severe asthma on patients' autonomy: A qualitative study. Health Expectation, 2019; 22: 528-536. doi.org/10.1111/hex.12879.

Sr.#	Author Name	Affiliation of Author	Contribution	Signature
1	Dr. Riffat Sadiq	Assistant Professor Department of Applied Psychology, Govt. College Women University, Faisalabad	Research designing, discussion, data analysis methodology	Deap
2	Ms. Huma Javed	Lecturer Department of Applied Psychology, Govt. College Women University, Faisalabad	Introduction, results, Literature review references	++
3	Hifza Jabeen	BS Students Department of Applied	Research designing and	Hitza Jakara
4	Urwah Khan	Psychology, Govt. College Women	planning, data collection	Uprusat.
5	Fizza Fareed	University, Faisalabad	Literature review	Juniforden Juiterpreture Secure
6	Fariha Ashiq Ali			quiterpation
7	Kainat Sakhawat,			Second
8	Amna Tariq			Arres
9	Aneeta Umar			Ander