CODEN [USA]: IAJPBB ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES
http://doi.org/10.5281/zenodo.3247076

Available online at: http://www.iajps.com Research Article

ANALYSIS OF QUALITY OF LIFE IN PATIENTS WITH RHEUMATIC HEART DISEASE IN PAKISTAN

Dr Maria Irfan[1], Dr Kiran Sadiq[2], Dr Naila Rani[3]

[1]WMO at DHQ hospital, Mandi Bahauddin

[2]WMO at BHU Kot Sai Singh Jhangh

[3]Sargodha Medical College, Sargodha

Abstract:

Introduction: *Rheumatic heart disease has top position in the category of non-communicable diseases especially in developing countries, where people have low income and unhygienic food and it is up to 200000 premature deaths worldwide every year.* ***Aims and objectives:*** *The main objective of the study is to analyse the quality of life in patients with rheumatic heart disease in Pakistan.* ***Material and methods:*** *This descriptive study was conducted in DHQ hospital, Mandi Bahauddin during October 2018 to February 2019. The data was collected from 50 patients with rheumatic heart disease. The data was collected through a questionnaire. In collection of data many socio-demographic variables and findings on prevalence were assessed, like sampling techniques, special care in data sorting and protocol of screening.* ***Results:*** *The data was collected from 50 patients of both genders. Most of the patients have facing multiple risk factors. Prevalence of rheumatic heart disease detected through cardiac auscultation was 14.6 per 900 patients (95% CI 1.2-5.0) and through echocardiography. The mean age of cases was 33.77±12.19 years and that of the controls was 34.66±12.38 years. The lowest differences although significant were seen for emotional well-being (240.93 vs. 282.00), social functioning (101.33 vs. 122.00) and health change.* ***Conclusion:*** *It is concluded that rheumatic heart disease imposes a substantial burden on QoL. Anyhow the regions, where population are more educated and aware about risk factors have better diagnosis and quick treatment of rheumatic heart disease.*

Corresponding author:

Dr. Maria Irfan,

WMO at DHQ hospital, Mandi Bahauddin

.

QR code

Please cite this article in press Maria Irfan et al., ***Analysis Of Quality Of Life In Patients With Rheumatic Heart Disease In Pakistan.,*** *Indo Am. J. P. Sci, 2019; 06[06].*

INTRODUCTION:

Rheumatic heart disease has top position in the category of non-communicable diseases especially in developing countries, where people have low income and unhygienic food and it is up to 200000 premature deaths worldwide every year. In last few decade, in researches has developed to a many researches that demonstrate that huge burden of rheumatic heart disease is growing faster after 2003. Anyhow no proper population based researches on incidence of acute fever have been documented from all over world [1].

Acute rheumatic fever, an inflammatory disease of the heart, joints, central nervous system and subcutaneous tissue, develops after a throat infection by one of the group haemolytic streptococci. Rheumatic heart disease (RHD) is usually turned into a chronic state causing congestive heart failure, stroke, endocarditis and death [2]. While the incidence of rheumatic fever and RHD has been decreased in developed countries since the early 20th century, they are still major causes of morbidity and mortality in young age in the developing countries, including Pakistan [3].

It is approximated that there are around 15 million cases of RHD worldwide, with 470,000 newly diagnosed cases and 233,000 deaths each year. The prevalence of RHD is more in females compared to the males, because women are house bound and therefore are more likely to be affected by overcrowding. RHD is one of the major causes of early death and disability in Pakistan. The prognosis of patients with RHD is very poor [4]. The beginning of this chronic state usually results in devastating symptoms and physical presentations, all taking part in poor quality of life in these patients.

Rheumatic fever is originate from abnormality in autoimmune reaction from streptococcal pharyngitis group A, Which is appear as large joints arthritic changes, affects the valvular parts and cardiac inflammation, also affects skin and the brain. The most quick and efficient therapeutic treatment for acute rheumatic fever and rheumatic heart disease is antibiotic prophylaxis [5].

Aims and objectives

The main objective of the study is to analyse the quality of life in patients with rheumatic heart disease in Pakistan.

MATERIAL AND METHODS:

This descriptive study was conducted in DHQ hospital, Mandi Bahauddin during October 2018 to February 2019. The data was collected from 50 patients with rheumatic heart disease. The data was collected through a questionnaire. In collection of data many socio-demographic variables and findings on prevalence were assessed, like sampling techniques, special care in data sorting and protocol of screening. The data was collected and analysed using SPSS version 19.0.

RESULTS:

The data was collected from 50 patients of both genders. Most of the patients have facing multiple risk factors. Prevalence of rheumatic heart disease detected through cardiac auscultation was 14.6 per 900 patients (95% CI 1.2-5.0) and through echocardiography. The mean age of cases was 33.77±12.19 years and that of the controls was 34.66±12.38 years. The lowest differences although significant were seen for emotional well-being (240.93 vs. 282.00), social functioning (101.33 vs. 122.00) and health change.

Table 01: Comparison of analysis of diseased group with normal patients

Parameters	Study Groups	Mean ± S.D.	Median ± IQR	p-Value*
General Health	Case	209.60 ± 83.87	200.00 ± 125.00	<0.001
	Control	303.33 ± 88.40	300.00 ± 131.25	
	Total	256.47± 98.00	250.00 ± 150.00	
Physical Functioning	Case	364.00 ± 218.14	350.00 ± 350.00	<0.001
	Control	734.67 ± 275.99	800.00 ± 412.50	
	Total	549.33± 310.05	550.00 ± 538.00	
Role functioning/ Physical	Case	52.66 ± 105.35	0.00 ± 100.00	<0.001
	Control	234.00 ± 161.29	300.00 ± 300.00	
	Total	143.33 ± 163.53	100.00 ± 300.00	
Role functioning/ Emotional	Case	70.00 ± 96.06	0.00 ± 100.00	<0.001
	Control	135.33 ± 123.77	100.00 ± 300.00	
	Total	102.67 ± 115.34	100.00 ± 200.00	
Emotional well being	Case	240.93 ± 100.77	230.00 ± 160.00	0.001
	Control	282.00 ± 97.72	280.00 ± 125.00	
	Total	261.47 ± 101.20	260.00 ± 155.00	
Bodily Pain	Case	73.90 ± 62.06	85.00 ± 90.00	<0.001
	Control	132.20 ± 54.60	135.00 ± 90.00	
	Total	103.05± 65.25	110.00 ± 110.00	
Vitality	Case	132.13 ± 68.85	120.00 ± 100.00	<0.001
	Control	220.93 ± 85.83	210.00 ± 125.00	
	Total	177.00 ± 75.37	180.00 ± 100.00	
Social Functioning	Case	101.33 ± 63.31	100.00 ± 100.00	0.004
	Control	122.00 ± 55.40	125.00 ± 100.00	
	Total	111.67 ± 60.28	100.00 ± 125.00	
Health Change	Case	63.33 ± 30.33	75.00 ± 50.00	<0.001
	Control	46.50 ± 26.07	50.00 ± 50.00	
	Total	54.92± 29.46	50.00 ± 50.00	
Total Score	Case	1307.90 ± 509.21	1260.00 ± 762.50	<0.001
	Total	1008.33± 576.59	805.00 ± 760.00	

DISCUSSION:

There is many researches and articles had found with to much less methods and statistical analysis with different population regions13. Many of them are under supremacy to review prevalence with precise results due to low population samples or participants. Mostly the area were not defined properly in researches, it may be influence the future planning in future prevention of disease [6]. Some researchers conduct study on basis of school

sampling, which may be influence the results due to socioeconomic status which is directly related to affordability of educational expenditures [7]. Although on the sensitivity point of view, in most of researches no any proper interaction between prevalence in school as well as community based studies.

The present data demonstrated a significant relationship between RHD and poor QoL in mostly young people [8]. Our study showed that the likelihood of an RHD patient having poor QoL was greater than a healthy individual ($p<0.001$). Comparison of the present study sample with a sample of patients with rheumatic fever showed a correlative pattern of deterioration. Although heart disease employs a significant impact on physical health from the medical point of view, most studies on quality of life also reported low scores in the psychosocial aspects, as were found in the present study [9]. Low scores in the emotional dimension show the suffering of patients from their chronic illness. Adolescents with severe heart disease reported higher level of anxiety and depression as compared to the age-matched healthy controls. Study on QoL in adults with congenital heart diseases showed that inoperable conditions had a trend towards a poorer quality of life [10,11].

CONCLUSION:

It is concluded that rheumatic heart disease imposes a substantial burden on QoL. Anyhow the regions, where population are more educated and aware about risk factors have better diagnosis and quick treatment of rheumatic heart disease.

REFERENCES:

1. Wolf PA, Abbott RD, Kannel WB. Atrial fibrillation as an independent risk factor for stroke: the Framingham Study. Stroke. 1991; 22:983-8.
2. Guyatt GH. Measurement of health-related quality of life in heart failure. J Am Coll Cardiol. 1993; 22:A185-A91.
3. DeMaso DR, Lauretti A, Spieth L, Van Der Feen JR, Jay KS, Gauvreau K, et al. Psychosocial factors and quality of life in children and adolescents with implantable cardioverter-defibrillators. Am J Cardiol. 2004; 93:582-7.
4. Ruo B, Rumsfeld JS, Hlatky MA, Liu H, Browner WS, Whooley MA, et al. Depressive symptoms and health-related quality of life: the Heart and Soul Study. JAMA. 2003; 290:215-21.
5. Cohen M, Mansoor D, Langut H, Lorber A. Quality of life, depressed mood, and self-esteem in adolescents with heart disease. Psychosom Med. 2007; 69:313-8.
6. Herring MP, Puetz TW, O\\\'Connor PJ, Dishman RK. Effect of exercise training on depressive symptoms among patients with a chronic illness: a systematic review and meta-analysis of randomized controlled trials. Arch Intern Med. 2012; 172:101-11
7. Lane D, Lip G, Millane T. Quality of life in adults with congenital heart disease. Heart. 2002; 88:71-5.
8. Varni JW, Limbers CA, Burwinkle TM. Impaired health-related quality of life in children and adolescents with chronic conditions: a comparative analysis of 10 disease clusters and 33 disease categories/severities utilizing the PedsQL™ 4.0 Generic Core Scales. Health Qual Life Outcomes. 2007; 5:12-43.
9. Varni JW, Burwinkle TM, Lane MM. Health-related quality of life measurement in pediatric clinical practice: an appraisal and precept for future research and application. Health Qual Life Outcomes. 2005; 3:32-4.
10. White CA. Cognitive behavioral principles in managing chronic disease. West J Med. 2001; 175:338-42.
11. Khalil A, Mansour M, Attaia H. Effect of Chronic Rheumatic Heart Disease on Intellectual Functioning in School Age Children. Curr Pshyciatry. 1998; 5:65-8.