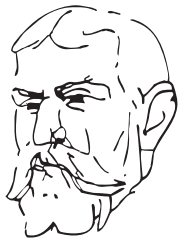
Wiadomości Lekarskie

Czasopismo Polskiego Towarzystwa Lekarskiego



Pamięci
dra Władysława
Biegańskiego

TOM LXXII, 2019, Nr1

Rok założenia 1928

Aluna Publishing

Wiadomości Lekarskie is abstracted and indexed in: PubMed/Medline, EBSCO, SCOPUS, Index Copernicus, Polish Medical Library (GBL), Polish Ministry of Science and Higher Education.

Zasady prenumeraty miesięcznika Wiadomości Lekarskie na rok 2019

Zamówienia na prenumeratę przyjmuje Wydawnictwo Aluna:

– e-mailem: prenumerata@wydawnictwo-aluna.pl
– listownie na adres:

Wydawnictwo Aluna
ul. Z.M. Przesmyckiego 29, 05-510 Konstancin-Jeziorna

Prosimy o dokonywanie wpłat na numer rachunku Wydawnictwa:
Credit Agricole Bank Polska S. A.: 82 1940 1076 3010 7407 0000 0000

Cena prenumeraty dwunastu kolejnych numerów: 240 zł/rok (w tym 5% VAT)

Cena prenumeraty zagranicznej: 120 euro/rok.
Cena pojedynczego numeru – 30 zł (w tym 5% VAT) + koszt przesyłki.
Przed dokonaniem wpłaty prosimy o złożenie zamówienia.

Wiadomości Lekarskie

Managing Editor:
Agnieszka Rosa amarosa@wp.pl

International Editor:
Lesia Rudenko l.rudenko@wydawnictwo-aluna.pl

Distribution and Subscriptions:
Bartosz Guterman prenumerata@wydawnictwo-aluna.pl

Graphic design / production:
Grzegorz Sztank www.red-studio.eu

Publisher:
ALUNA Publishing
ul. Przesmyckiego 29, 05-510 Konstancin – Jeziorna
www.aluna.waw.pl www.wiadomoscilekarskie.pl
www.medlist.org

SPIS TREŚCI

PRACA ORYGINALNA
ORIGINAL ARTICLE

IMPROVED QUALITY OF LIFE OF PATIENTS WITH RHEUMATOID ARTHRITIS AND NONPSYCHOTIC MENTAL DISORDERS

POPRAWA JAKOŚCI ŻYCIA U CHORYCH Z REUMATOIDALNYM ZAPALENIEM STAWÓW I NIEPSYCHOTYCZNYMI ZABURZENIAMI PSYCHICZNYMI

Svitlana Savka
THE HIGHER STATE EDUCATIONAL ESTABLISHMENT OF UKRAINE, "BUKOVINA STATE MEDICAL UNIVERSITY", CHERNIVTSI, UKRAINE

ABSTRACT

Introduction: Somatic pathology of patients with rheumatoid arthritis (RA) combined with nonpsychotic mental disorders (NMD) leads to deterioration in the quality of life.
The aim: We aimed to examine the quality of life of patients with rheumatoid arthritis and nonpsychotic mental disorders.
Materials and methods: We formed two clinical groups of observation of the patients with rheumatoid arthritis and nonpsychotic mental disorders. First group (GA) included participants with duration of RA for 1-5 years, second group (GB) included those with duration of RA for 5-10 years. For assessment we used the Hamilton Rating Scale for Depression (HRSD), Hamilton Rating Scale for Anxiety (HRSA) and the Quality of Life Index developed by J.E. Mezzich (QLI). All patients received basic treatment, as well as antidepressants, anxiolytics, vitamin therapy and psychotherapy, depending on the form of nonpsychotic mental disorders.
Results: Study of the life quality showed that for the examined patients the quality of life was significantly lower in comparison with the control group. Mainly, for GA partners the overall assessment of life quality after treatment improved by 12,1% and the positive effect was probable. The greatest positive changes for the first group included increasing of physical well-being points by 2,5 and psychological/emotional well-being – by 2,1 points($p<0,05$). Mainly, for GB patients overall quality of life improved by 14,9%. Major positive changes were identified in psychological/emotional well-being - 2,93 points, physical well-being by 2,47 points, self-care and independent functioning by 2,09 points, and disability which increased by 2,06 points ($p <0,05$)
Conclusions: The patients with rheumatoid arthritis and nonpsychotic mental disorders have a significant decline in quality of life based on all indicators. The general assessment of the life quality of the first basic clinical group surveyed was $62,2 \pm 1,33$, while for the second basic clinical group surveyed – $57,0 \pm 1,47$. The increase in the duration of the RA disease significantly weakens the general working capacity by 0,83 points $p<0,05$, self-service and independence of the patients by 0,80 points, $p<0,05$, psychological and emotional well-being by 0,75 points, $p<0,05$, interpersonal interaction at 0,91 points, $p<0,05$.The overall quality of life of the patients with duration of RA for 1-5 years and NMD after treatment was $74,1\% \pm 0,93$, for the patients with duration of RA for 5-10 years and NMD after treatment was $71,9\% \pm 1,20$ ($p <0,05$).

KEY WORDS: Nonpsychotic mental disorders, rheumatoid arthritis, quality of life

Wiad Lek 2019, 72, 1, 47-51

INTRODUCTION

Rheumatoid arthritis is a chronic autoimmune disease with a worldwide adult prevalence of 0.2-1.2 % [1]. This disease is painful and progressive, leading to increasing levels of disability and systemic complications [2]. Rheumatoid arthritis is in 2-3 times more common among middle-aged women than among men. Incidence of rheumatoid arthritis among women over 65 years old is about 5%. The problem of the interaction between rheumatoid arthritis and mental disorders is an issue of interest according to current research [3-5]. Measurement and evaluation of health-related the Quality of Life Index provides valuable and relevant data for patients, clinicians and researchers. The health-related QLI can be used to monitor population's health with a particular connection to the emerging concept of positive health; to evaluate the effects of social- and health-related policies for the distribution of resources according to necessity, for the diagnosis of the nature, severity, and prognosis of a disease, and for the evaluation of treatment outcomes [6].

THE AIM

We aimed to study the quality of life of patients with rheumatoid arthritis and nonpsychotic mental disorders.

MATERIALS AND METHODS

One hundred and twenty patients with a diagnosis of Rheumatoid arthritis, who attended clinics for follow-up visits between June 2011 and November 2016, were examined in the course of this study. The study was approved by the ethics committee of the hospital and written consents were obtained from the patients.

Patients with a diagnosis of RA and aged between 20 and 60 years were subject of the study. Exclusion criteria

Table I. Demographic features of patients

Parameters	Group A (n=55)	%	Group B (n=65)	%	Control group (n=40)	%
Age (year)	37.9 ± 1.82		37.9 ± 1.82		36.5 ± 1.70	
Sex						
male	9	16,4	13	20,0	7	17,5
female	46	83,6	52	80,0	33	82,5
Marital status						
Married	34	61,8	38	58,4	26	65
Single	11	20,0	7	10,8	12	30,0
Divorced	10	18,2	20	30,8	2	5,0
Educational status						
Primary school graduates	35	63,6	48	73,8	25	62,5
College graduates	5	9,1	4	6,2	12	30,0
University graduates	15	27,3	13	20,0	3	7,5
Place of residence						
City	24	43,6	25	38,5	24	60,0
Village	25	45,5	38	58,5	14	35,0
Urban village	6	10,9	2	3,1	2	5,0

Table II. Nonpsychotic mental disorders of patients with rheumatoid arthritis

Parameters	Group A (n=55)	%	Group B Z(n=65)	%
Anxiety-depressive disorders (F- 41.2)	13	23,6	31	47,7
Disorders of adaptation (F- 43.2)	26	47,3	14	21,5
Somatoform disorder (F- 45)	5	9,1	17	26,2
Anxiety-phobic disorders (F- 40.8)	11	20,0	3	4,6

were as follows: age less than 20 years and over 60 years, trauma and/or history of a severe heart failure, malignancy, additional connective tissue disease, previously diagnosed peripheral nervous system involvement.

The patients of first basic clinical group (GA) included participants with duration of RA for 1-5 years; the second basic clinical group included those with duration of RA for 5-10 years. The third control group of comparison included 40 healthy people. The remaining demographic variables, age, sex, education, relationship status, place of residence were comparable among these three groups. The results of the survey were compared with the data of 40 persons in the control group.

The patients with a diagnosis of rheumatoid arthritis and nonpsychotic mental disorders were examined using Hamilton Rating Scale for Depression (HRSD) and Hamilton Rating Scale for Anxiety (HRSA) and the Quality of Life Index (QLI). HRSD and HRSA are both 35-questioned multiple-choice self-report inventories. For depression, 21 points and over are significant; for anxiety, 14 points and over are significant. The Quality of Life Index (QLI). QLI developed by Mezzich et al. was also used (it is a self-reporting questionnaire). Its purpose is to measure health-related QLI and it includes the following 10 items or domains: physical well-being, psychological/emotional well-being, self-care and independent functioning, occupational functioning, interpersonal functioning, social-emotional support, community and services support, personal fulfillment, spiritual fulfillment, and overall QLI [7].

Patients were compared based on the presence of the nonpsychotic mental disorders associated with duration of RA for 1-5 years, and with duration of RA for 5-10 years. Correction of NMD was carried out using medical treatment and psychotherapy. All patients received basic treatment, as well as antidepressants (venlafaxine – 75mg/day), anxiolytics (buspirone – 15 mg/day), vitamin therapy (magnesium lactate, pyridoxine hydrochloride) and psychotherapy, depending on the form of nonpsychotic mental disorders. Psychotherapy was conducted along with psychopharmacological treatment, which included sessions of rational psychotherapy with gestalt therapy elements. The course of treatment consisted of 20 sessions of psychotherapy, using the technique of gestalt therapy for duration of 40 minutes.

Primary data of scientific research were transferred to the electronic database. Statistical analysis was performed in SPSS for Windows 17.0 and STATISTICA for Windows 5.1. In the course of statistical processing results corresponded to the normal (Gaussian) distribution. Assessment of the type of distribution was carried out with the definition of the degree

Table III. Indicators of quality of life in the surveyed groups (by method of Mezzich J.E., Cohen N., Ruiperez M. 1999)

№	Parameters	Group (n=160) / indexes					
		Group A (n=55)		Group B (n=65)		Control group(n=40)	
		M	m	M	M	M	M
1	Physical well-being	4,69*	0,14	4,40*	0,18	8,90	0,10
2	Psychological/emotional well-being	5,78*	0,25	5,03*,**	0,23	8,27	0,17
3	Self-care and independent functioning	7,80*	0,18	7,0*,**	0,19	9,60	0,10
4	Occupational functioning	5,89*	0,21	5,06*,**	0,22	9,15	0,10
5	Interpersonal functioning	6,98*	0,22	6,07*,**	0,19	8,07	0,20
6	Social-emotional support	6,34*	0,24	5,28*	0,18	7,55	0,16
7	Community and services support	4,67*	0,25	4,43*	0,19	7,12	0,22
8	Personal fulfillment	6,78*	0,19	6,86*	0,19	8,12	0,14
9	Spiritual fulfillment	6,90*	0,21	7,16*	0,18	7,25	0,26
10	The general perception of the quality of life	6,38*	0,15	6,07*	0,17	8,37	0,11
11	Overall assessment of quality of life	62,2*	1,33	57,0*	1,47	82,4	1,04

Note: * - the probable difference (p <0,05) with in the control group, ** - between the GA and the GB patients.

Table IV. Dynamics of quality of life indicators for patients of the main group A in the process of treatment

№	Parameters	Period of examination			
		Before treatment		After treatment	
		M	m	M	m
1	Physical well-being	4,69	0,14	7,14*	0,12
2	Psychological/emotional well-being	5,78	0,25	7,87*	0,17
3	Self-care and independent functioning	7,80	0,18	8,47*	0,14
4	Occupational functioning	5,89	0,21	7,58*	0,17
5	Interpersonal functioning	6,98	0,22	7,65*	0,17
6	Social-emotional support	6,34	0,24	7,00*	0,18
7	Community and services support	4,67	0,25	5,40*	0,23
8	Personal fulfillment	6,78	0,19	7,49*	0,16
9	Spiritual fulfillment	6,90	0,21	7,32*	0,17
10	The general perception of the quality of life	6,38	0,15	7,74*	0,11
11	Overall assessment of quality of life	62,2	1,33	74,1*	0,93

Note: * - probable difference (p <0,05)

of central tendency. When calculating the statistical variables, we calculated the arithmetic mean sample (M) and the standard error of the arithmetic mean (m). When estimating the probability of the difference between the average values, the coefficient t was calculated using the Student method. For the assessment of the likelihood of difference, account taken was of the generally accepted level in the medical-biological studies the level of probability (p) - p <0,05.

RESULTS AND DISCUSSION

The first clinical group included 55 patients with a duration of rheumatoid arthritis up to 5 years old (mean age 37,9 ± 1,82), among which women predominated (46 persons – 83,6%). The second main group consisted of 65 patients with a duration of rheumatoid arthritis from 5 to 10 years old (mean age 37,9 ± 1,82), among whom females dominated (52 persons – 80,0%) [8]. Control group included 40 person (mean age 36,5 ± 1,70), among whom females also dominated as well (33 persons – 82,5%). The demographic features of the patients are shown in Table I.

Nonpsychotic mental disorders including anxiety-depressive disorders were diagnosed for 44 patients (36,7%), disorders of adaptation – 40 patients (33,3%), somatoform disorder – 22 patients (18,3%), anxiety-phobic disorders – 14 patients (11,7%). The mental disorders characteristics in group A and B are presented in Table II.

Table V. Dynamics of quality of life indicators of patients of the main group B in the process of treatment

№	Parameters	Period of examination			
		Before treatment		Before treatment	
		M	m	M	m
1	Physical well-being	4,40	0,18	6,87*	0,13
2	Psychological/emotional well-being	5,03	0,23	7,96*	0,16
3	Self-care and independent functioning	7,00	0,19	9,09*	1,07
4	Occupational functioning	5,06*	0,22	7,00*	0,17
5	Interpersonal functioning	6,07	0,19	7,47*	0,17
6	Social-emotional support	5,28	0,18	6,55*	0,16
7	Community and services support	4,43	0,19	5,13*	0,18
8	Personal fulfillment	6,86	0,19	7,67*	0,15
9	Spiritual fulfillment	7,16	0,18	7,63*	0,16
10	The general perception of the quality of life	6,07	0,17	7,55*	0,12
11	Overall assessment of quality of life	57,0	1,47	71,9*	1,20

Note: * - probable difference (p <0,05)

The quality of life means system of indicators that characterize the peculiarities of realization and satisfaction of human needs. World Health Organization defines quality of life as a perception of physical, psychological and social well-being, independence, satisfaction with a specific level of life and other components of psychological comfort. The quality of life of a sick person is considered as an integral characteristic of his condition consisting of physical, psychological, social components. Each of the components in turn includes a number of components, such as physical component includes the symptoms of the disease, the ability to perform physical work, the ability to self-service; psychological - anxiety, depression, hostile behavior; social - social support, work, public relations. Comprehensive study of these components makes it possible to determine the level of the life quality and influence of the components on the life quality as well as to answer the question what should affected in order to improve it (adjusting treatment, providing social support).

Study of the life quality showed that for the examined patients the quality of life was significantly lower in comparison with the control group. In particular, patients had significant complications in the performance of daily activities due to both physical and mental well-being, reduced performance and low level of public and official support (table III).

GA patients had low level of physical well-being (4,69 ± 0,14), public and official support (4,67 ± 0,25), psychological and emotional well-being (5,78 ± 0,25). Examining the GB patients, minimum number of points was given for physical well-being (4,40 ± 0,18), community and services support (4,43 ± 0,19), occupational functioning (5,06 ± 0,22), psychological and emotional well-being (5,03 ± 0,23) and social and emotional support (5,28 ± 0,18). At the same time, the indicators of spiritual fulfillment, self-care and independent functioning named above, namely, the spiritual fulfillment of GA patients (6,90 ± 0,21), GB patients (7,16 ± 0,18), self-care and independent functioning of GA patients (7,80 ± 0,18), of GB patients (7,00 ± 0,19).

Somatic pathology of patients with rheumatoid arthritis is accompanied by a number of negative sensory and psychological phenomena, which in general leads to deterioration in the quality of life [9, 10]. NMD have a negative impact on patients' quality of life assessment. The increase in the duration of RA disease impairs the most general occupational functioning and self-care and independent functioning of the patients, psychological and emotional well-being, and interpersonal functioning. All other components of the quality of life in both groups are significantly lower than in the control group.

As a result of analyzing the dynamics of the life quality indicators for patients with RA and NMD under the influence of complex treatment, the following features were identified. In the main group A, the overall assessment of quality of life improved by 12,1% and the positive effect was probable. The greatest positive changes in the first group were related to the aspect of physical well-being, namely, increasing the feeling of energy, lack of pain and physical problems by 2,5 points and psychological/emotional well-being (good feeling, coherence with oneself) – by 2,1 points (p<0,05). Minor positive changes were identified in the sphere of spiritual fulfillment (feeling of faith, religiousness and going beyond the ordinary material life) – increasing by 0,4 points (table IV).

In the main group B, overall quality of life improved by 14.9% (table V). The dynamics of improvement of the life quality according to various indicators in this group had characteristics similar to patients in the first group and major positive changes were identified in the following aspects: psychological/emotional well-being – increasing by 2,93 points, physical well-being – by 2,47 points, self-care and independent functioning (implementation of daily

tasks, adoption their own decisions) - by 2,09 points, and disability which increased by 2,06 points (p <0,05).

Minor positive changes in the second group were noted by the indicator of spiritual fulfillment (increased by 0,47 points) and public and official support (by 0,70 points), social and emotional support (by 1,27 points), namely, the ability of people surveyed to believe and offer help and emotional support (p <0,05). The insignificant dynamics of the results on the point of socio-emotional support for patients with prolonged course of the disease may be occurred due to the fact that in 83,0% of the families studied psychological comfort was unfavorable and they had the highest level of negative communicative installation.

The management of symptoms of NMD in routine care is recommended by the National Institute for Health and Care Excellence (NICE) [12], and NMD is treatable within the context of long-term physical health conditions [13-15].

In general, the positive dynamics of the overall quality of life indicator after the treatment of nonpsychotic mental disorders in both main groups was noted. In the first group, the overall quality of life before treatment was higher by 5,0%, and after treatment by 2,0% compared to the second group (p <0,05).

CONCLUSIONS

1. The patients with rheumatoid arthritis and nonpsychotic mental disorders have a significant decline in quality of life based on all indicators. The general assessment of the quality of life of the examined patients in the first basic clinical group is 62,2 ± 1,33, while in the second basic clinical group examined – 57,0 ± 1,47. Longer duration of the RA disease significantly weakens the general working capacity by 0,83 points p<0,05, self-service and independence of the patients by 0,80 points, p<0,05, psychological and emotional well-being by 0,75 points, p<0,05, interpersonal interaction at 0,91 points, p<0,05.
2. The overall quality of life of the patients with duration of RA for 1-5 years and NMD after treatment was 74,1% ± 0,93, patients with duration of RA for 5-10 years and NMD after treatment was 71,9% ± 1,20 (p <0,05).

REFERENCES

1. Singh J.A., Saag K.G., Bridges Jr.S.L., Akl E.A., Bannuru R.R., Sullivan M.C., et al. American College of Rheumatology Guideline for the treatment of rheumatoid arthritis. Arthritis Rheumatol. 2016;68:1-26.
2. Aletaha D., Neogi T., Silman A.J.. Rheumatoid arthritis classification criteria: an American College of Rheumatology/European League Against Rheumatism collaborative initiative. Ann Rheum Dis. 2010;69:1580-8.
3. Matcham F., Rayner L., Steer S., Hotopf M. The prevalence of depression in rheumatoid arthritis: a systematic review and meta-analysis. Rheumatology. 2013;52:2136-48.
4. Aker D.A., Kose S., Solmaz M., Bal Z.E., Akin E. Temperament and Character Dimensions of Personality in Patients with Chronic Pain Disorders. J of Mood Disord. 2017;7:1-9.
5. Volkan Yılmaz, Ebru Umay, İbrahim Gündoğdu, Zeliha Özgür Karaahmet, Arif Erhan Öztürk. Rheumatoid Arthritis: Are psychological factors effective in disease flare? Eur J Rheumatol 2017; 4: 127-32
6. Kurt I Schwartz, María I Zapata-Vega, Juan E. Mezzich, Guido Mazzotti. Validation study of the Multicultural Quality of Life Index (MQLI) in a Peruvian sample Rev Bras Psiquiatr. 2006;28(1):24-8
7. Mezzich J.E., Cohen N.L., Ruiperez M.A. A quality of Life Index: brief description and validation. In: Paper presented at the International Congress of the International Federation for Psychiatric Epidemiology. Santiago de Compostela: Spain; 1996.
8. Savka S.D. Patopsychological features of patients with rheumatoid arthritis and nonpsychotic mental disorders. World science. 2018; 5(32):36-38.
9. Matcham F., Norton S., Scott D.L., Steer S., Hotopf M. Symptoms of depression and anxiety predict treatment response and long-term physical health outcomes in rheumatoid arthritis: a secondary analysis of a randomised controlled trial. Rheumatology (Oxford). 2016;55:268-78.
10. Rathbun A.M., Reed G.W., Harrold L.R. The temporal relationship between depression and rheumatoid arthritis disease activity, treatment persistence and response: A systematic review. Rheumatology. 2013;52:1785-94.
11. Matcham F., Davies R., Hotopf M., Kimme L., Norton H. S., Steer S., Galloway J. The relationship between depression and biologic treatment response in rheumatoid arthritis: An analysis of the British Society for Rheumatology Biologics Register Rheumatology. 2018;57(5): 835-43.
12. National Collaborating Centre for Mental Health. Depression in Adults with a Chronic Physical Health Problem: Treatment and Management. 2010. https://www.nice.org.uk/guidance/cg91/evidence/full-guideline-243876061.
13. Matcham F., Rayner L., Hutton J., Monk A., Steel C., Hotopf M. Self-help interventions for symptoms of depression, anxiety and psychological distress in patients with physical illness: a systematic review and meta-analysis. Clin Psychol Rev. 2014;34:141-57.
14. Fiest K.M., Hitchon C.A., Bernstein C.N., Peschken C.A., Walker J. R., Grafet L.A.et al. Systematic review and meta-analysis of interventions for depression and anxiety in persons with rheumatoid arthritis. J Clin Rheumatol 2017;23:425-34.

Conflict of interest:
The Author declare no conflict of interest.

CORRESPONDING AUTHOR

Svitlana Savka
65a, Heroyiv Maydanu str., flat 50, 58029, Chernivtsi, Ukraine
tel: +380679411728
e-mail: savka.svitlana@bsmu.edu.ua

Received: 18.07.2018
Accepted: 21.11.2018