

A Correlation Study on Health Promoting Life Style Factors with Quality of Life and Self-Esteem among Arthritis Patient from a Selected Hospital of Bagalkot

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Abstract

Original Research Article

Background of the study: Patients with inflammatory rheumatic diseases (IRDs) often express their desire to ensure the success of medical treatment or to replace anti rheumatic drugs, at least partially, by changing lifestyle factors. This desire is fostered by the plethora of media reports that describe the influence of nutrition, body weight, physical fitness and stress level on health and life expectancy. **Aim:** To find the correlation between health promoting life style factors, quality of life and self-esteem among arthritis patient from a selected hospital of Bagalkot. **Materials and methods:** Purposive sampling technique was used to select the 150 samples. Health promoting life style factors, quality of life and self-esteem was assessed by standardized scales. **Results:** among 150 samples of arthritis patients 88 samples had low self-esteem, 79 samples had moderate quality of life, regarding health promoting life style factors moderate amount of general life style is about 119(79.33%), good were 31 (20.66%), and there is no poor amount of general life style. Health responsibly is moderately about 110(73.33%), good were 33(22%) and poor amount of 7(4.66%). Physical activity among arthritis patient is moderately about 110(73.33%), good amount of physical activity is about 20(13.33%), and poor amount of 20(13.3%). In this study good amount of nutrition is about 75(50%), moderate amount of 67(45.66%) and poor were 8(5.33%). The moderate amount of spiritual growth is 108(72%), good were 42(28%) and there is no poor spiritual growth. The moderate amount of 108(72%) is reported, in the study of interpersonal relationship among people is moderately 104(69.33%), a good amount of 45(30%) and in poor were 1(0.66%). The stress management is moderately managed about 108(72%), a good amount of stress management is about 42(28%) and there is poor amount stress management in health promoting life style factor among arthritis patient. There is a significant correlation between HPLF and QOL ($R = 0.72118$), there is a negative correlation between HPLF and self-esteem ($R = -0.415$). There is a significant association between quality of life with selected demographic variables like age ($\chi^2 = 25.19$, $df = 3$), occupation ($\chi^2 = 12.68$, $df = 5$), monthly family income ($\chi^2 = 9.19$, $df = 3$), bad habits ($\chi^2 = 11.65$, $df = 3$), family history of arthritis ($\chi^2 = 5.27$, $df = 1$). There is a significant association between self-esteem with selected demographic variables like occupation ($\chi = 5.33$, $p = 0.3769$), Education qualification ($\chi = 174.13$, $p < 0.0001$). There is a significant association between HPLF with selected demographic variables like Gender ($\chi = 15.46$, $p < 0.001$), Type of family ($\chi = 6.163$, $p = 0.0459$). **Conclusion:** There is impairment in self-esteem, QOL and HPLF among arthritis patients so there is a need to plan and conduct some interventional studies to correct these impairments among arthritis patients.

Keywords: Health promoting Life style, quality of life, self esteem, arthritis.

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INTRODUCTION

Patients with inflammatory rheumatic diseases (IRDs) often express their desire to ensure the success of medical treatment or to replace anti rheumatic drugs, at least partially, by changing lifestyle factors. This desire is fostered by the plethora of media reports that describe

the influence of nutrition, body weight, physical fitness and stress level on health and life expectancy [1]. In addition, patients with rheumatic diseases represent a target audience for advertisement campaigns soliciting food items with real or putative health-promoting features and for other commercial offers that promise

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improved fitness, a healthier life and an increased level of well-being [2, 3]. However, under the scrutiny of evidence-based medicine, only a handful of lifestyle factors are of proven influence for patients with IRD. Most data in this respect are provided for rheumatoid arthritis (RA), clearly showing that lifestyle is important with respect to the risk of this disease [4]. Rheumatic diseases have a significant adverse impact on the individual from physical, mental and social aspects, resulting in a low health-related quality of life (HRQL). There is a lack of longitudinal studies on HRQL in people with rheumatic diseases that focus on factors promoting HRQL instead of risk factors [5]. Rheumatic diseases have a significant adverse impact on the individual from physical, mental and social aspects [6], resulting in a low health-related quality of life (HRQL) [7-9]. Recent research suggests that individuals with rheumatoid arthritis (RA) who receive a multi-disciplinary team-based care at a rheumatology clinic get improved HRQL and also a decrease in symptoms from the joints and in inflammatory parameters up to 12 months after an intervention [10,11].

Hence researcher has planned to undertake “A correlation study on health promoting life style factors with quality of life and self-esteem among arthritis patient from a selected hospital of Bagalkot.”

MATERIAL AND METHODS

Study design and participants

Present study was Descriptive Cross sectional research design. Prior to data collection the permission was obtained from arthritis patients and hospital authority. A purposive sampling technique was used to select the 150 subjects for the present study. Among arthritis patients and who were able to understand read

and write Kannada or English or Hindi and are available at the time of data collection are selected for the study. In the present study the data will be collected by using quality of life scale, self esteem scale and Health promoting life style factors Profile II scale.

Data Analysis

Data will be analysed by using descriptive and inferential statistics. Numerical data obtained from the sample was organized and summarized with the help of descriptive statistics like percentages, mean and standard deviation. Chi-square test used to find out association between the HPLF, QOL and self-esteem scores with selected demographical variable of arthritis patient. Spearman rank correlation was used to find the correlation between HPLF scores with self esteem scores and quality of life scores.

RESULTS

Description of socio-demographic characteristics of subjects.

The study results showed that, on analysis of frequency and percentage distribution of demographic variables, 11 samples (36.66%) were in the age group of 56-65 years, 81(54%) comes under the age group of 41-60. female patient 79(52.7%) have arthritis. 37 (24.66) were having primary education, 60 (40%) were belongs to housewife. 17 (56.66%) food habits were vegetarian. 89 (59.33%) were mixed group. 36 (65%) of patients have been suffering from 3 years of arthritis, 67(44.66%) of patients have been suffering from 1 year of arthritis.

To assess the health promoting life style factor, quality of life, self-esteem among arthritis patient.

a) To assess the self-esteem among arthritis patient.

GRADES	SCORE	FREQUENCY	PERCENTAGE
Low self esteem	<15	8	58.60
Normal	15-25	62	41.33
High self esteem	>25	0	0
Total		150	100%

The above table shows that majority have low self-esteem is 8 (58.60%), and normal self-esteem is 62

(41.33%). There is no high self-esteem among arthritis patient.

b) To assess the Quality of life among arthritis patient

SNO	GRADE	SCORE	FREQUENCY	%
1	Very poor	26	00	00
2	Poor	27-52	00	00
3	moderate	53-78	79	52.66
4	Good	79-104	63	42
5	Very good	105-130	08	5.4

The above table shows that moderate amount of quality of life among arthritis patient is about 79 (52.66%), A good amount of quality of life among

arthritis patients is 63 (42%), A very good amount of quality of life is about 8 (5.4%) and there is no poor and

very poor amount of quality of life among arthritis patients.

c) To assess the health promoting life style factor

level	General life style		Health responsibility		Physical activity		Nutrition		Spiritual growth		Interpersonal relation		Stress management	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Poor	0	0	7	4.66	20	13.3	8	5.33	0	0	1	0.66	0	0
Moderate	119	79.33	110	73.33	110	73.33	67	45.66	108	72	104	69.33	108	72
Good	31	20.66	33	22	20	13.33	75	50	42	28	45	30	42	28
Total	150	100%	150	100%	150	100%	150	100%	150	100%	150	100%	150	100%

General life style – Poor (52-70 scores), moderate (71-139 scores), Good (140-208 scores)

Health responsibility—Poor (9-12 scores), Moderate (13-24scores), Good (25-36 scores)

Physical activity—Poor (8-11 scores), Moderate (12-22 scores), Good (23-32 scores)

Nutrition -- Poor (9-12 scores), Moderate (13-24scores), Good (25-36 scores)

Spiritual Growth --- Poor (9-12 scores), Moderate (13-24scores), Good (25-36 scores)

Interpersonal relationship-- Poor (9-12 scores), Moderate (13-24scores), Good (25-36 scores)

Stress management-- Poor (8-11 scores), Moderate (12-22 scores), Good (23-32 scores)

Part 3: The correlation between HPLF with quality of life among arthritis patient

VARIABLES	MEAN	MEDIAN	RANGE	SD	R VALUE	SIGNIFICANCE
HPLF	125.01	126	86-166	17.44	0.7218	Significant
QOL	18.97	76	56-106	9.981		

The above table shows that there is a significant correlation between HPLF with QOL ($r=0.7218$). The mean value of the HPLF is about 125.01 and the mean value of QOL is about 18.97. The median value of the

HPLF is about 126, and median value of the QOL is about 76. And range of the HPLF is about 86-166, QOL of range is 56-106. The SD value of HPLF was 17.44 and QOL was 9.981.

Part 4: The correlation between HPLF with self-esteem among arthritis patient

VARIABLES	MEAN	MEDIAN	RANGE	SD	R VALUE	SIGNIFICANCE
HPLF	125.01	126	86-166	17.44	-0.415	Significant
SELF ESTEEM	14.34	14	11-20	2.18		

The above table shows that there is a significant negative correlation between HPLF and Self esteem ($R = -0.415$). The mean value of the HPLF is about 125.01 and the mean value of self-esteem is about 14.34. The

median value of the HPLF is about 126, and median value of the self-esteem is about 14. And range of the HPLF is about 86-166, self-esteem range is 11-20.

Part 5: To find the association between health promoting life style factor with quality of life among arthritis patient.

SI NO	Demographic variables	Chi square	df	Table value	P value	Significance
1	Age	25.19	3	7.815	<0.0001	S
2	Gender	2.74	1	3.841	0.0979	N S
3	Marital status	1.03076	4	9.488	0.9052	N S
4	Occupation	12.68	5	11.070	0.266	S
5	Education qualification	4.53	5	11.070	0.4759	N S
6	Type of family	4.2832	2	5.99	0.1175	N S
7	Monthly family income	9.1	3	7.815	0.0280	S
8	Type of diet	0.92	1	3.841	0.3375	N S
9	Suffer with arthritis	1.821	3	7.815	0.6104	N S
10	Other diseases DM HTN	0.07	1	3.841	0.7910	N S
11	Bad habit	11.65	3	11.65	0.0087	S
12	Family history of arthritis	5.27	1	5.27	0.0217	S

The above table depicts that there is a significant association between quality-of-life score with

selected demographic data like age ($X^2=25.19$, $df=3$), occupation ($X^2=12.68$, $df=5$), bad habit ($X^2=11.65$,

df=3), family history of arthritis ($X^2=5.27$, df=1). Remaining selected demographic variables are not having significant association with quality-of-life scores.

To find the association between health promoting life style factor with self-esteem among arthritis patient.

Association between self esteem with selected demographic variable

S:NO	Demographic variables	Chi Square value	df	Table value	P value	significant
1	Age	1.587	3	7.815	0.6623	NS
2	Gender	0.038	1	3.841	0.8454	NS
3	Marital status	3.424	4	9.488	0.4895	NS
4	Occupation	5.53	5	11.070	0.3769	S
5	Education qualification	174.136	5	11.070	<0.0001	S
6	Type of family	1.09	2	5.99	0.5798	NS
7	Monthly family income	2.02	3	7.815	0.5683	NS
8	Type of diet	2.9	1	3.841	0.0886	NS
9	Suffer with arthritis	3.63	3	7.815	0.3043	NS
10	Other diseases DM HTN	0.42	1	3.841	0.5169	NS
11	Bad habit	4.322	3	7.815	0.2289	NS
12	Family history of arthritis	0.168	1	3.841	0.6819	NS

The depicts that there is a significant association between self-esteem with selected demographic variable like occupation ($X^2=5.53$, df=5), educational qualification ($X^2=174.136$, df=5),

Remaining selected demographic variables are not having significant association with quality-of-life scores.

To find the association between health promoting life style factor, quality of life and self-esteem scores with selected demographical variables of arthritis patient.

SL:NO	Demographic variables	Chi square value	df	Table value	P value	significant
1	Age	1.74	3	7.815	0.6281	NS
2	Gender	15.46	1	3.841	<0.001	S
3	Marital status	1.307	4	9.488	0.8602	NS
4	Occupation	7.75	5	11.070	0.1706	NS
5	Education qualification	2.827	5	11.070	0.7266	NS
6	Type of family	6.163	2	5.99	0.0459	S
7	Monthly family income	1.421	3	7.815	0.7006	NS
8	Type of diet	0.398	1	3.841	0.8419	NS
9	Suffer with arthritis	3.27	3	7.815	0.3518	NS
10	Other diseases DM HTN	0.38	1	3.841	0.5376	NS
11	Bad habit	3.7291	3	7.815	0.2935	NS
12	Family history of arthritis	1.07	1	3.841	0.3009	NS

The above table depicts that there is a significant association between self-esteem with selected demographic variable like gender ($X^2=15.46$, df=1), type of family ($X^2=6.163$, df=2), Remaining selected demographic variables are not having significant association with quality-of-life scores.

DISCUSSION

The findings were supported by study conducted by V. Nisha (2014), to assess the effectiveness of foot reflexology on pain among patients with arthritis. The study results showed that, on analysis of frequency and percentage distribution of demographic variables, majority of the patient 11 (36.66%) were between the age group of 56-65 years. In this study majority of the patient

81(54%) comes under the age group of 41-60. V Nisha study states that majority of patients 17 (56.66%) were female have arthritis. In this study majority of female patient 79(52.7%) have arthritis. In that study states that education of majority of patient 14(46.66%) were having primary education. In this study 37 (24.66) were having primary education. In that study states that occupation of majority of patients 15(50%) were belongs to moderate worker whereas in this study states that 60(40%) were belongs to housewife. With regard to that study majority of patients 17(56.66%) food habits were vegetarian. In this study states that 89(59.33%) were mixed group. In that study states that 36(65%) of patients have been suffering from 3 years of arthritis, whereas in this study states that 67(44.66%) of patients have been suffering from 1 year of arthritis.

In the Danish and Swedish Eira study health promoting life style factor majority of general life style study is about 95%. In our study majority of general life style is about 119(79.33%). In that that study Majority of health responsibility is moderately about 50%. In this study health responsibly is moderately about 110(73.33%). In Danish study nutrition was moderate amount 50%. In this study good amount of nutrition is about 75(50%). In that study moderate amount of spiritual wellbeing is 20%. In our study the moderate amount of 108(72%) is reported. In that study the interpersonal relationship among people is moderately about 20%. In our study the interpersonal relationship among people is moderately 104(69.33%). In Danish study stress management is population-based survey of 19890 participants reported an association between loneliness and the prevalence of arthritis. The stress is moderately managed about 108(72%).

The study was conducted at the department of Rheumatology and Immunology to find the Quality-of-life arthritis patients; in that study the mean score was 0.87 (SD; 0.91) $p < 0.05$. In our study moderately 79(52.66%) of quality of life of the arthritis patient.

A study conducted from the Rheumatology of the first affiliated hospital that is collected 200 arthritis patients from January 2017 to May 2018. The correlation between health promoting life style factor with quality of life that total score is of the scale is ($p < 0.010$).

A study conducted from the Rheumatology of the first affiliated hospital that is collected 135 arthritis patient at 2003. The correlation between health promoting life style factor with self-esteem that total score of the scale is age ($p = 0.001$), occupation ($p = 0.0015$), duration of arthritis ($p = 0.000$).

RECOMMENDATIONS

Similar study can be conducted to assess the effectiveness of exercise on reduction of the joint pain. Similar type of study can be conducted for a large group.

- Similar study can be conducted as a correlation study between interventional methods.
- Similar study can be done for larger samples for wider generations.
- The study can be conducted to assess alternatives therapies in treatment of joint pain.
- The similar studies may be conducted using other type of alternative therapies and nutrition.

CONCLUSION

After thorough analysis of the data, it is understood that promoting life style factors related and assessment quality of life and self-esteem are helpful in arthritis patients to enhance their quality of life and self esteem. There is a significant correlation between HPLF

with QOL ($r = 0.7218$). The mean value of the HPLF is about 125.01 and the mean value of QOL is about 18.97. The median value of the HPLF is about 126, and median value of the QOL is about 76. And range of the HPLF is about 86-166, QOL of range is 56-106. The SD value of HPLF was 17.44 and QOL was 9.981.

Ethical Consideration

The study was approved by the Institutional Ethical Clearance Committee, BVVS Sajjalashree Institute of Nursing Sciences, Bagalkot.

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Conflicts of Interest: There are no conflicts of interest.

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