

Quality Of Life among Patients with Chronic Liver Disease

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Abstract

The present study was aimed to assess “quality of life among patients with chronic liver disease at Sree Gokulam Medical College ,Venjaramoodu ,Trivandrum”. The objectives of the study were to assess the quality of life among patients with chronic liver disease and to determine the association between selected socio-personal variables and QOL .Researcher adopted quantitative research approach. Consecutive sampling technique was used to collect data from 95 samples. Data regarding the quality of life was collected from the inpatient and outpatient department of medical and gastroenterology department of Sree Gokulam Medical College using SF-36 questionnaire .Results of the study proves that majority of subjects (44.2%) belongs to the age group of 45-59 years and were males(86%) Under the quality of life domains 36.8% subjects had poor physical functioning, 58.9% had normal role function. 64.2% were physically active and 23.2% subjects had very good emotional wellbeing. According to social functioning 56.8% subjects had very good social functioning. In case of history of suffering pain 43.2% subjects had no history of pain. Based on general health 27.4% subjects had good general health . Out of total subjects 45.3% were diagnosed with CLD 1-3 years back and out of them 13.7% had good general health in comparison with < 1 year (9.5%) and 3-5 year(4.2%) .The study concluded that 52.6% had average quality of life and there is a significant association between occupation and smoking with quality of life at $p < 0.001$ and $p < 0.05$ respectively .

Key Words :-chronic liver disease; quality of life; patients

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Need and significance of the study

Chronic liver diseases in general are increasingly widespread, and diseases of the liver in particular are considered as a global public health problem. Chronic liver disease (CLD) substantially contributes to mortality and morbidity rates. Over the last few decades, assessing quality of life (QoL) of individuals with diseases has become common clinical practice, as a consequence of increased survival of patients with chronic diseases. Studies of chronic liver disease have consistently shown that HRQOL is significantly poorer in both cirrhotic and non-cirrhotic patients than healthy controls or normative data .The general aim of this study was to evaluate QOL in patients with liver cirrhosis and also to look for associations between QOL scores and demographical characteristics.

I. Statement of the problem

A descriptive study on assess the quality of life among patients with chronic liver disease at Sree Gokulam Medical College ,Venjaramoodu ,Trivandrum.

Objectives

1. To assess the quality of life among patients with chronic liver disease.
2. To determine the association between selected socio-personal variables and quality of life among patients with chronic liver disease.

II. Methodology

Research approach : Quantitative research approach

Research Design : Descriptive research design

Setting of the study : The inpatient and outpatient department of medical and gastroenterology department of Sree Gokulam Medical College.

Population : All chronic liver disease patients

Sample : 95 patients with chronic liver disease who are attending the inpatient and outpatients department under medical and gastroenterology in Sree Gokulam Medical College , Venjaramoodu.

Sampling technique : consecutive sampling technique

Criteria for sample selection

Inclusion criteria:

The present study included the adults:-

1. Clinically diagnosed with chronic liver disease, for not more than five years.
2. Who are willing to participate in the study

Exclusion Criteria:

The present study excluded :-

Chronic liver disease Patients with other chronic diseases like cancer, musculoskeletal, cardiac and neurologic illness.

Tools of the study

Tool 1: Socio-personal proforma

Section A: Socio demographic data

Section B: Clinical variables

Tool 2: SF 36 questionnaire to collect data on quality of life.

III. Data Analysis

Organization of the findings

- Section 1:** Distribution of subjects according to socio-personal variables.

A:- Distribution of subjects according to socio-demographic variables

B) Distribution of subjects based on clinical variables.

- Section 2:** Assessment of quality of life among patients with chronic liver disease.

- Section 3:** Association between quality of life and selected socio-personal variables among patients with chronic liver disease .

- Section 1 A:- Distribution of subjects according to socio-demographic variables**

n=95

Variables	Frequency (f)	Percentage(%)
Age (in year)		
30-44	7	7.4
45-59	42	44.2
60-74	36	37.9
>75	10	10.5
Gender		
Male	83	87.6
Female	12	12.4
Type of family		
Nuclear	94	98.9%
Joint	1	1.1%
Marital status		
Single	1	1.1

Married	78	82.1
Divorced	1	1.1
Widow/widower	15	15.7
Education		
Professionals	2	2.1%
Graduate/postgraduate	14	14.7%
High school/intermediate/diploma	9	9.5%
Lower /upper primary	70	73.7%
occupation		
Legislators /Manager	3	3.2
Professionals	9	9.5
Technicians	4	4.2
Service workers/market and shop keepers	30	31.6
Agricultural and fishery workers	16	16.8
Craft and related trade workers	8	8.4

□

Section 1 B: Distribution of subjects according to clinical variables

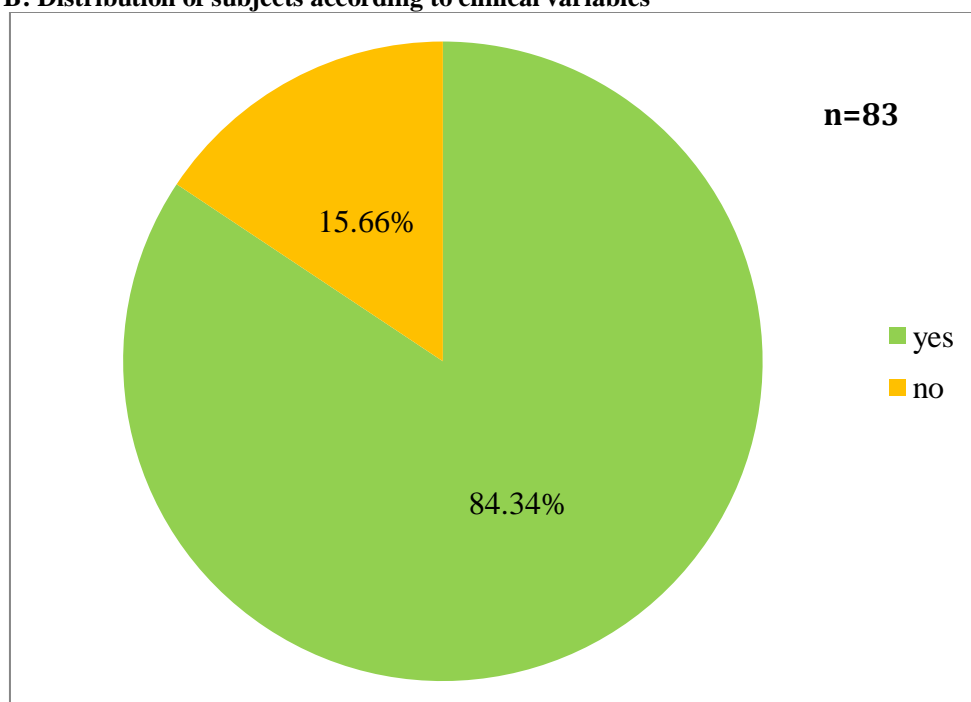


Fig 1: Pie diagram showing percentage distribution of subjects according to alcoholism

**Table 2: Percentage distribution of subjects according to number of drinks per month
n=71**

NO of drinks /month	frequency	Percentage(%)
0-10 days	23	33.6
11-20 days	7	9.26
21-30 days	41	57.14

Table 3: Percentage distribution of subjects according to co morbidities
n= 67

Co morbidities	Frequency(f)	Percentage (%)
Diabetes mellitus	24	35.82
Hypertension	6	8.9
Diabetes and hypertension	16	23.88
Dyslipidemia	13	19.5
Chronic kidney disease	1	1.5
Hepatitis B	3	4.5
Hepatitis C	4	5.9

Table 4: Frequency and percentage distribution of subjects according to diagnosis of chronic liver disease.

n=95

Diagnosis of CLD	Frequency(f)	Percentage(%)
<1 Year	36	37.9
1-3 Years	43	45.3
3-5 Years	16	16.8

SECTION 2: Assessment of quality of life among patients with chronic liver disease.

Table 5: frequency and percentage distribution of qol based on physical functioning

Domain	Grading	Frequency (f)	Percentage(%)
Physical functioning	Poor	35	36.8
	Average	12	12.5
	Good	14	15
	Very good	34	35.7
Role limitation due to physical health	limited	9	9.5
	Moderately limited	14	14.7
	normal role function	72	75.8
Role limitation due to emotional problems	limited	27	28.5
	Moderately limited	12	12.6
	Normal role function	56	58.9
Energy/fatigue	Tired	13	13.7
	Moderately tired	21	22.1
	Physically active	61	64.2
Emotional well being	Poor	12	12.6
	Average	21	22.1
	Good	40	42.1
	Very good	22	23.2
general quality of life	Poor	11	11.6
	Average	50	52.6
	Good	34	35.8

SECTION 3: Association of quality of life among patients with chronic liver disease and selected socio-personal variables.

Table 6 :Association of QOL of subjects with socio-personal variables such as age, gender and occupation.

Variables	poor /Average	good	χ^2	df	P
Age 30-59 >60	29 32	20 14	1.113	1	0.200
Gender Male Female	51 10	32 2	2.186	1	0.122
Occupation Legislator/manager/Professionals/Technicians Service workers/market and shop keeper Agriculture and fishery workers/Craft and related workers Plant and machine operators/Unskilled workers/Un employers	11 25 4 21	5 21 6 2	11.98	3	0.007**

Table 7:Association of QOL of subjects with socio-personal variables such as education and history of alcoholism and smoking.

Variables	poor /Average	good	χ^2	df	P
Education Professionals/Graduate/post graduate Highschool/intermediate/diploma/primary school	9 52	7 27	0.531	1	0.466
Alcoholic Yes No	46 15	24 10	1.262	1	0.609
Smoking Yes No	29 32	9 25	4.038	1	0.044*

Table 7: Association of QOL of subjects with socio-personal variables such as number of drinks used per month ,diagnosis of CLD and co morbidities.

Conclusion

Variables	poor /Average	good	χ^2	df	P
No drinks /month 0-10 days 11-20 days 21-30 days	24 28 9	11 3 11	3.046	2	0.218
Diagnosis of CLD <1 year 1-3 years 3-5 years	24 28 9	12 15 7	0.551	2	0.759
Co morbidities Diabetesmellitus/Hyper tension Diabetes and hypertension/ Dyslipedemia/Chronic kidney disease Hepatitis B /Hepatitis C	20 19 14	10 11 3	0.241	2	0.887

In present study majority of subjects (44.2%) belongs to the age group of 45-59 years ,37.9% in the age group of 60-74 years ,10.5% were in the age group of >75 years of age and 7.4% were on the age group of 30-44 years .Based on the gender majority of subjects (86%) were males and 12.4% were females. About type

of the family most of the subjects (98.9%) belongs to nuclear family and 1.1% were joint family. In case of marital status more than three fourth of the subjects (82.1%) were married ,15.7% were widow/widower and very small percentage (1.1%) were single and divorced respectively. According to education more than half (73.7%) had lower and upper primary education ,14.7% had graduate, 9.5% were intermediate education and 2.1% were professionals.

Based on the occupation 16.8% were agricultural and fishery workers ,near to half of the subjects (31.6%) were service workers /market and shop keepers,20% of subjects were unemployed ,8.4% craft and related trade workers ,3.2 % were legislators,9.5% were professionals , 4.2% were technicians and unskilled workers and 2.1% were plant and machine workers. Majority of subjects (36.8%) had monthly income of \geq 32050 ,33.7% had 16020-32049 and 29.5% had 12020-16019 rupees .

In case of subjects with history of smoking more than half of the subjects (54.22%) had history of smoking and 45.78% had no history of smoking. Based on the history of alcoholism majority of the subjects (84.34%) had history of using alcohol and 15.66% had no history of alcoholism. In case of number of drinks of alcohol per month 57.14 % were used drinks 21-30 days per month,33.6% subjects were used 0-10 days and 9.26 % were used drinks 11-20 days per month. In case of co-morbidities majority of subjects (35.82%) had history of diabetes ,8.9% were hypertensive , 23.88% had both diabetes and hypertension ,19.5% had dyslipidemia ,1.5% had chronic kidney disease,4.5% had hepatitis B and 5.9% had history of hepatitis C.

According to diagnosis of chronic liver disease majority of subjects 45.3% were diagnosed with chronic liver disease within 1-3 years ,37.9% were diagnosed within <1 year and 16.8% were diagnosed within 3-5 years. Based on BMI Majority of subjects (58.3%) had BMI under range between 2-29.9,1% had <18.5 kg/m² , 24.9% were range under 18.5-24.9 kg/m² and 15.8% were under the range of ≥ 30 kg/m².

Based on the quality of life 36.8% subjects had poor physical functioning,12.5% subjects had average physical functioning, 15% subjects had good physical functioning and 35.7% subjects had very good physical functioning . In case of role limitation due to physical health 75.8% had normal role function due to physical health,14.7% had moderate limitation ,9.5% had very limited role limitation due to physical health. Based on the role limitation due to emotional problems 28.8% subjects had very limited role limitation due to emotional problems,12.6% had moderate role limitation due to emotional problem,58.9% had normal role limitation due to emotional problems.

For the domain of energy and fatigue to assess the quality of life 13.7% subjects used to get easily tired while doing activities ,where as 64.2% were physically active . Based on the domain of emotional wellbeing, 12.6% subjects had poor emotional well being, 22.1% had average emotional well being ,42.1% subjects had good emotional well being,23.2% subjects had very good emotional wellbeing . In social functioning domain,22.1% subjects had average social functioning, 21.1% subjects had good social functioning and 56.8% subjects had very good social functioning. Based on pain domain, 15.8% subjects had suffering severe pain,20% subjects had moderate pain ,21% had mild pain, 43.2% subjects had no history of pain. Based on the domain of general health, 24.2% subjects had poor general health,23.2% subjects had average general health,27.4% subjects had good general health,25.2% subjects had very good general health.Based on general quality of life 11.6% of subjects had poor quality of life ,52.6% had average quality of life and 35.8% subjects had good quality of life.

Based on the QOL comparison with diagnosis of CLD majority of subjects (17.9%) with a clinical diagnosis of CLD within 1-3 years had poor physical functioning, 34.7% had normal role function due to physical health, 26.3% and normal role function due to emotional problems.33.7% were physically active,18.9% had good emotional wellbeing , 26.3% had very good social functioning , 13.7% had good general health and majority of subjects (21.1%) with a clinical diagnosis of CLD within <1 year had no history of pain .

Based on association with selected socio-personal variables with overall quality of life there was a significant association between occupation and quality of life at ($p<0.001$) and association between smoking and quality of life at ($p<0.05$).

Nursing implications

The investigator has drawn the following implications from the study which, were of vital concern for nursing practice, nursing education, nursing administration and recommendation for nursing research.

Implications for nursing practice

➤ Nurses can assess the CLD patients with regard to specific domains so that general quality care can be improved.

Implications for nursing education

- Health care personnel should be given an opportunity to update their knowledge regarding CLD.
- Nurses should participate CLD related seminars, group discussions, conferences and workshops so they can get the additional knowledge and skill about it.

Implications for nursing research

- Nursing personnel and students should be encouraged to conduct study and research related to quality of life of chronic liver disease patients and scholarship or financial support should be given for such research work.
- Various studies have been conducted by nurses from developed countries in helping to improve the quality of life of chronic liver disease patients. In Indian setting very few research studies have been conducted in this area. Therefore various interventions to assess the quality of life of chronic liver disease patients can be considered to be emerging area for nursing research.

Implications for nursing administration

- All necessary facility and infrastructure to CLD related activities and involve large number of the nurses in the programme.
- Hospital should develop a central health education cell where self learning materials, leaflets, pamphlets and health education materials are available for catering the public and patients about chronic liver disease.

Limitations

Some of the limitations of the present study were:

- Generalization of the findings is restricted because of limited sample size.
- Samples were taken from a single hospital only.

Recommendations

Based on the study findings of present study the following recommendation can be made for further study:

- A similar study can be replicated on a large population for making broader generalization
- A study can be conducted in different settings to find out the quality of life among patients with chronic liver disease.

REFERENCES

- [1]. Chronic liver disease ,[internet][Cited 2018 April 10]. available from https://en.wikipedia.org/wiki/Chronic_liver_disease#cite_note-1
- [2]. Heibelbaugh JJ, Bruderly M. Cirrhosis and chronic liver failure: part I. Diagnosis and evaluation. Am Fam Physician. [internet].2006 Sep 1[cited 2018 April 5];74(5):756–62.Available from <https://www.ncbi.nlm.nih.gov/pubmed/16970019>
- [3]. Schuppan D, Afdhal NH. Liver cirrhosis. Lancet.[internet]. 2008 Mar 8[cited 2018 April 15];371(9615):838–51.Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2271178/>
- [4]. Liver disease in India (stats), [internet] [cited 2018 may 7].Available from <https://www.livertransplant.org/liver-transplantation/awareness/liver-diseases-in-india-stats>
- [5]. Quality of life ,[internet],[cited 2018 April 7].Available from https://en.wikipedia.org/wiki/Quality_of_life#cite_note-1
- [6]. Jyotirivastava. Quality of life of patients with chronic liver disease. ISSN [internet] 2013[cited 2017 June 15]; 2319-7064.Available from <https://www.ijsr.net/archive/v4i5/SUB152871.pdf>
- [7]. Valerie Tothova, Sylva Barlova. Quality of life in patients with chronic disease. Research Gate [internet]2014[cited 2018 April 5] November 35 (suppl) 11-18.Available in https://www.researchgate.net/publication/268986345_Quality_of_life_in_patients_with_chronic_diseases
- [8]. Environment and health and quality of life ,[internet]. 2016 June 3[cited 2018 April 3].Available from <https://www.eea.europa.eu/soer/synthesis/synthesis/chapter5.xhtml>
- [9]. Cindy LK Lam and Ian J Lauder. The impact of chronic diseases on the health-related quality of life (HRQOL) of Chinese patients in primary care. Oxford University Press[internet] 2000[cited 2018 April 20], Vol. 17, No.2.Available from <https://watermark.silverchair.com/159.pdf?token=AQECAHi208BE49Ooan9kkhW>.
- [10]. Neila paula de souza ,Livia Melovillar . Assessment of health-related quality of life and related factors in patients with chronic liver disease. The Brazilian Journal of infectious disease [internet] November–December 2015[cited 2018 May 10], VOLUME 9,ISSUE 6, Pages 590-595.Available in <https://www.sciencedirect.com/science/article/pii>
- [11]. Radan Bruha, Karel Dvorak, and Jaromir Petrtyl. Alcoholic liver disease. World J Hepatol [internet]. 2012 Mar 27[cited 2018 May 10]; 4(3): 81–90.Available in <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3321494/>
- [12]. Gutteling JJ, de Man RA, Busschbach JJV, Darlington A-SE. Overview of research on health-related quality of life in patients with chronic liver disease. Neth J Med [internet]. 2007 [cited 2018 may 12]Aug;65(7):227–34.Available from <https://www.ncbi.nlm.nih.gov/pubmed/17656809>
- [13]. Is liver disease the next major lifestyle disease of India after diabetes and BP?.TNN [internet]. Apr 11, 2017[cited 2018 June 23], 12:11 IST. Available from <https://timesofindia.indiatimes.com/life-style/health-fitness>.
- [14]. Dr Harish Kareem: An emerging silent epidemic.[internet]08th May 2018 [cited 2018 April 7].Available from <http://www.newindianexpress.com/cities/kochi/2018/may/07/>
- [15]. S. K. Sarin and Rakhi Maiwall. Global Burden Of Liver Disease: A True Burden on Health Sciences and Economies.[internet],[cited 2018 May 30]. Available from <http://www.worldgastroenterology.org/publications>

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