

## HEALTHY BEHAVIORS ADJUSTMENT IN THE ELDERLY PATIENTS WITH CHRONIC LIVER CIRRHOSIS

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### Abstract:

Liver cirrhosis is a dangerous, serious, and irreversible disease. The liver tissue is replaced with fibrotic scar tissue as regenerative nodules. Elderly patients with cirrhotic liver disease experience severe symptoms with negative and bad impacts on their daily activities, healthy behaviors, and health life. Elderly patients should deal with them emotionally, socially, and physically. **Aim:** Assess healthy behaviors adjustment in the elders with chronic liver cirrhosis. **Method:** A descriptive research design was utilized. **Setting:** This study was conducted at medical department located in the third floor in Talkha Central Hospital and contains 30 beds affiliated to the Ministry of Health and at medical department located in the second floor in Specialized Medical Hospital and contains 45 beds affiliated to Mansoura University. **Subjects:** The study included 290 cirrhotic elderly patients. **Tools:** Data related to this study was collected using four tools, I: Socio-demographic and clinical data structured interview schedule, II: Barthel Index Scale, III: Hospital Anxiety and Depression Scale, IV: Jalowiec coping scale. **Results:** There was a strong positive statistically significance relation between functional status, psychological health status ( $P= 0.000^*$ ), and total affective coping behavior in elderly patients ( $P= 0.008^*$ ). **Conclusion & Recommendations:** There was a strong positive statistically significance relation between functional status, psychological health status, and total affective coping behavior in elders.

**Key words:** Chronic liver cirrhosis, Elderly patients, Healthy behaviors adjustment.

### I. Introduction

Liver Cirrhosis is defined as the histological development of regenerative nodules surrounded by fibrous bands in response to chronic liver injury, that leads to portal hypertension and end stage liver disease. Recent advances in the understanding of the natural history and pathophysiology of cirrhosis, and in treatment of its complications, resulting in improved management, quality of life and life expectancy of cirrhotic patients. At present, liver transplantation remains the only curative option for a selected group of patients, but pharmacological therapies that can halt progression to decompensated cirrhosis or even reverse

cirrhosis are currently being developed. This concise overview focuses on diagnosis, complications and management of cirrhosis, and novel clinical and scientific developments (Detlef Schuppan & Nezam H. Afdhal, 2009).

Egypt has one of the highest prevalence rates of hepatitis C virus (HCV) in the World that cause liver cirrhosis. Chronic HCV infection in the 15-59 age group is Nearly 10% (over 8 million people), and the rate increases with age to reach more than 25% in 50-60 year-olds. In Egypt an estimated 150,000 new infections every year, and morbidity and mortality caused by HCV

is expected to double in the next 20 years . The high prevalence of chronic hepatitis C has led to a surge in the numbers of patients suffering from end-stage liver disease. *(Yosry A & Esmat G, 2015)*.

Certain causes are more prevalent among older individuals with chronic liver cirrhosis as non alcoholic fatty liver disease, alcoholic liver disease, chronic viral hepatitis C. Common problems and complications associated with liver cirrhosis depend on the amount of damage in the liver, regarding to compensated cirrhosis, the liver has significant scarring but is still able to perform essential functions without causing significant symptoms, while decompensated cirrhosis, liver functions is significantly impaired with obvious manifestations of liver failure, A lot of complications that occurs for elderly patient with liver cirrhosis as portal hypertension, esophageal varices, ascites, hepatic encephalopathy, nutritional deficiencies *(Runyon, 2011)*.

Liver cirrhosis disease isn't curable, so the treatment for cirrhosis varies depending on the cause and stage of the disease, because liver damage cannot be reversed, treatment is aimed to delaying the damage and stopping complications. *(Sundaram, 2009)*.

Nursing processes in management elderly patients with chronic liver cirrhosis are assessment of patient conditions, diagnosis of patient problems, planning patient care, implementation the plan of patient care, and evaluation of patient responses to interventions. General nursing care and management for liver cirrhotic elderly patients are monitor vital signs and mental status, restrict fluid intake and output, control patient weight, provide high calorie, low fat and sodium, low protein diet, provide frequent oral

hygiene, encourage coughing and deep breathing, provide emotional and psychological support and reduce feeling with anxieties and depression. *(Le mone& Buerke, 2007)*. The success of treatment depends on follow up of patients and family with life style changes, adequate dietary intake, rest, elimination of alcohol and cigarette smoking *(Smith, 2007)*.

## **II. Significance of the study**

Definite a lot of elders with chronic liver disease ,severity of symptoms and complications, and introduce adjust healthy behaviors to deal with these chronic diseases. Egypt has one of the highest prevalence rates of hepatitis C virus (HCV) in the World that cause liver cirrhosis. Chronic HCV infection in the 15-59 age group is Nearly 10% (over 8 million people).

### **Aim of the study:**

Assess healthy behaviors adjustment in the elderly patients with chronic liver cirrhosis.

### **Research question:**

What are the healthy behaviors adjustment in the elderly patients with chronic liver cirrhosis?

## **III. Method**

- 1. Research Design:** A descriptive research design was used in this study.
- 2. Setting:** This study was conducted at medical department located in the third floor in Talkha Central Hospital and contains 30 beds affilitated to the Ministry of Health and at medical department located in the second floor in Specialized Medical Hospital and contains 45 beds affilitated to Mansoura University.
- 3. Subjects:** Convenience sample of 290 cirrhotic elderly patients

attending to the mentioned hospital within a period of three months .

**4. Tools of data collection:** To achieve the aim of the study, four tools were used for data collection.

**Tool I Demographic and clinical data structured interview schedule:**

It was developed by the researcher after literature review and include two parts:

- Socio-demographic characteristics of the elderly patients such as age, sex, marital status, level of education, occupation, and income.
- Health history of the cirrhotic elderly patients such as: disease discovery, duration of disease, residence in hospitals, alcohol drinking, smoking of cigarretes, and measuring a symptoms in elderly patients with chronic liver disease.

**Tool I Barthel Index Scale:**

Barthel Index Scale was developed by **Malhoney (1965)** to activities measurement of daily living of the elders. This scale was translated into Arabic by **Hallaj (2007)**. This Arabic version was used in the present study. The scale consists of 10 questions which assess abilities of the persons in the areas of feeding, personal toilet, moving (from wheelchair to bed and return), getting on and off toilet, propelling a wheelchair, bathing self, dressing/ undressing, ascending and descending stairs, and controlling bowel and bladder. A score of 0 is given when he needs help and 2 is given when he isn't need help (independent).

**Tool I I I Hospital Anxiety and Dpression Scale (HADS):**

It was developed by **Zigmond & Snaith (1983)**. HADS is a self-report questionnaire commonly used to anxiety and depression level assessment. This scale translated into Arabic and tested for its validity and reliability by Abd

Elhameed (**Abd El-hamid,2010**). In the present study, arabic version was used. The HADS comprises statements which the rates of patient based on their experience over the past week. The 14 statements are relevant to anxiety generalization (7 statements) or depression (7 statements), Each question has 4 possible responses. In its recent form the HADS is now divided into four ranges: normal (0-7), mild (8-10), moderate (11-15), and severe (16-21).

**Tool IV Jalowiec coping scale**

Jalowiec coping scale was developed by (**Jalowiec & Power, 1981**). It was used to coping behaviors identifying of elderly patients with different chronic diseases. It was translated into Arabic and used by Abd El Meguid (**Abd El Meguid,1999**) and approved for validity and reliability by (**fadila, 2007**), it indicated that the scale has a reliability of 0.78. It consists of 40 items, classified into 15 problem-oriented coping behaviors, which focus on resolution of problem as look at the problem objectively, and accept the situation as it is, and 25 affective-oriented behaviors, which are aimed to distressing emotions handling as worry, want to be alone, and work off tension with physical activity.

**Method**

- 1-An official letter was issued from the Faculty of Nursing, Mansoura University to the director of Specialized Medical Hospital and Talkha Central Hospital to obtain approval to carry out the study.
- 2-The directors of Specialist Medicine Hospital and Talkha Central Hospital were informed about the purpose of the study, the date and the time of starting data collection in

order to obtain approval to interview the elderly patients.

- 3-Necessary approval was obtained from ethical committee of the Faculty of Nursing – Mansoura University.
- 4-After a through review of literature, tool I (Socio-demographic Characteristic and Clinical Data Structured Interview Schedule) was developed by the researcher and reviewed by the supervisors.  
**Validity testing:** Content validity of the tools (tool I, II, III, IV) was identified through literature reviewing. The content of data collection tools was validated by a jury of five experts in gerontological nursing and medical surgical nursing from Mansoura University to check clarity of sentences, appropriateness of content, sequence of items, accuracy of scoring, relevancy and coverage of the questions. Accordingly, their recommended modifications has been done and the final form was used for data collection.
- 5-The Arabic Versions of tool I (Barthel index scale) was used.
- 6-Verbal consent of the subjects was obtained after explanation of the purpose of the study.
- 7-A pilot study was carried out on 10% of elderly patients with chronic liver cirrhosis from outpatient clinics in Specialist Medicine Hospital before starting the data collection to test the feasibility of the tools and to identify the approximate time needed for the interview. The cirrhotic elderly

patients participated in the pilot study were excluded from the study sample.

- 8-The researcher meet with cirrhotic elderly patient in the waiting room either in inpatient wards or outpatient clinics. A face to face interview was conducted with each cirrhotic elder who fulfilled the study criteria.
- 9-Each cirrhotic elderly patient was interviewed individually by the researcher after the researcher introducing him self and explaining the purpose of the study. Then the necessary data were collected using the study tools. Patient's medical records were reviewed to complete the part of patient's health history.
- 10-The researcher started data collection based on the schedule days from 9 am to 2 pm and managed to interview from 7-9 cirrhotic elderly patients daily. Time taken to fill the study tools ranged from 25 to 30minutes for each patient.
- 11- The data collection covered a period of three months from the first of March, 2017 till the first of June, 2017.

#### **Ethical considerations:**

Patient privacy will be maintained, confidentiality of the collected data will be assured and participants will be able to withdraw from the study at any time with out responsibility.

#### **IV. Results**

**Table 1 :** Distribution of elderly patients with chronic liver cirrhosis according to their demographic characteristics

Items	N= 290	% 100
<b>Age (years):</b>		
60 ≤70 years	120	41.4
71 ≤ 80 years	118	40.7
≥80 years	52	17.9
<b>Mean ± SD</b>	<b>68.52±2.92</b>	
<b>Sex:</b>		
Male	190	65.5
Female	100	34.5
<b>Marital status:</b>		
Married	193	66.6
Widow	81	27.9
Divorced	14	4.8
Single	2	0.7
<b>Education level:</b>		
Mid-education	150	51.7
Illiterate	69	23.8
University education	62	21.4
Post- university education	9	3.1
<b>Residence:</b>		
Rural	160	55.2
Urban	130	44.8
<b>Working before retirement:</b>		
Working	214	73.8
Not working	76	26.2
<b>Working now:</b>		
Work without effort	284	97.9
Work with effort	6	2.1
<b>Monthly Income:</b>		
Enough	173	59.7
Not enough	77	26.5
Enough and Save	40	13.8
<b>Living system:</b>		
With family	103	35.5
With husband / wife	90	31.0
With sons	86	29.7
With relatives	8	2.8
Alone	3	1.0

**Table 1** Shows the distribution of elderly patients with chronic liver cirrhosis according to their socio-demographic characteristics. It was observed that 41.4% of the study subject were between 60-70 years old. Males were more prevalent in the study subject than females. It was observed that 66.6% of the studied elders were married, above half of studied subjects

had mid-education (51.7%), residence in rural areas in the studied elderly was more than residence in urban areas, the majority of the studied subjects (97.9%) were working without effort, it was observed that 59.7% had enough monthly income. Concerning living system of the studied subjects, 35.5% were living with family.

**Table 2 :** Distribution of the studied elderly with chronic liver cirrhosis according to their medical history

Items	N= 290	% 100
<b>Discovery of disease:</b>		
By chance	180	62.1
By symptoms	110	37.9
<b>Duration of disease (years):</b>		
1 ≤ 5 years	72	24.8
5 ≤ 10 years	68	23.4
≥ 10 years	150	51.7
<b>Mean ± SD:</b>	<b>2.26 ± 0.83</b>	
<b>Range</b>	<b>2.00</b>	
<b>Taking a sample from liver by the doctor:</b>		
Yes	151	52.1
No	139	47.9
<b>The result of sample:</b>	<b>(n= 151)</b>	
Level of cirrhosis is very big	51	33.7
Liver cirrhosis is big	50	33.1
Liver cirrhosis is few	50	33.1
<b>Previous hospitalization for liver cirrhosis:</b>		
One time	55	19.0
Two time	135	46.6
Three time	80	27.6
More than three	20	6.9
<b>Mean ± SD:</b>	<b>2.22 ± 0.83</b>	
<b>Range</b>	<b>3.00</b>	
<b>The cause of hospitalization:</b>		
Abdominal pain	65	22.4
Abdominal distension	154	53.1
Eye jaundice	8	2.8
Swelling body and foot	63	21.7
<b>The Last Time of hospitalization :</b>		
1-3 weeks	2	7
3-6weeks	32	11.0
More than 6 weeks	256	88.3
<b>Previous surgical experience :</b>		
Yes	258	89.0
No	32	11.0
<b>History of blood transfusion:</b>		
Yes	161	44.5
No	129	55.5
<b>History of schistosoma infection:</b>		
Yes	254	87.6
No	36	12.4
<b>History of drinking alcohol :</b>		
Yes	35	12.1
No	255	87.9
<b>History of cigarette smoking:</b>		
Yes	163	56.2
No	127	43.8
<b>Family history of liver disease:</b>		
No	121	41.7
I don't know	11	3.8
Liver cirrhosis	145	50.0
Liver failure	9	3.1
Hepatitis	4	1.4

**Table 2** Shows the distribution of the studied elderly with chronic liver disease according to their medical history. The table stated that 62.1% of the studied cirrhotic elderly patients discovered the disease by chance, it was observed that about one quarter (24.8%) of the studied subjects knew that they had the disease between one year and less than five years, Concerning taking a sample from liver by the doctor, 52.1% of the study subjects reported that, a

sample was taken by the doctor, 46.6% of the studied subjects were admitted to hospital for two times, 53.1% of the studied subjects were in hospital due to abdominal distention, majority of them (89%) had previous surgery, 55.5% of cirrhotic studied elderly hadn't blood transfusion, 87.6% had Schistosoma infection, the majority of the subjects (87.9%) don't drink alcohol, 56.2% of the studied elderly reported smoking cigarettes.

**Table 3:** Distribution of the studied elderly patients with chronic liver cirrhosis according to their functional status

Item	N= 290	% 100
<b>Barthel index scale for ADL</b>		
Dependent (0-7)	34	11.7
Independent with assistance (8-12)	86	29.7
Independent (13-20)	170	58.6
<b>Mean ± SD</b>	<b>Min – Max</b>	
<b>2.46 ± 0.69</b>	<b>1 - 3.0</b>	

**Table 3** shows the distribution of the studied elderly patients with chronic liver cirrhosis according to their functional status, it was observed that

11.7% of the studied elderly patients were totally dependent and 58.6% were independent in their ADLS.

**Table 4** Distribution of the studied elderly patients with chronic liver cirrhosis according to anxiety and depression level

Item	N= 290	% 100
<b>Anxiety level</b>		
Normal (0-7)	56	19.3
Mild (8-10)	26	9.0
Moderate (11-15)	102	35.2
Sever (16-21)	106	36.6
<b>Mean ± SD</b>	<b>Min – Max</b>	
<b>2.88 ± 1.10</b>	<b>1.00 – 4.00</b>	
<b>Depression level</b>		
Normal (0-7)	60	20.7
Mild (8-10)	75	25.9
Moderate (11-15)	100	34.5
Sever (16-21)	55	19.0
<b>Mean ± SD</b>	<b>Min – Max</b>	
<b>2.51 ± 1.02</b>	<b>1.0 - 4.0</b>	

**Table 4** Shows distribution of the studied elderly patients with chronic liver cirrhosis according to anxiety and depression level. It was observed that, majority of them ( 85.1%) complain

from anxiety, while (36.6%) cirrhotic studied elderly had severe anxiety level, it revealed that 34.5% had moderate depression level.

**Table 5 :** Distribution of the studied elderly patients with chronic liver cirrhosis according to frequency of using affective oriented coping behaviors

Affective – oriented coping behaviors	N = 290										Mean (SD)
	Never used		Occasionally		About half the time		Often		Always		
	No	%	No	%	No	%	No	%	No	%	
1-Hope that things will get better	----	----	7	2.4	69	23.8	167	57.6	47	16.2	2.87(0.69)
2-Eat, smoke, and chew gum	3	1.0	39	13.4	65	22.4	156	56.9	18	6.2	2.53(0.84)
3-Pray, trust in God	----	----	2	0.7	13	4.5	163	56.2	112	38.6	3.32(0.59)
4-Get nervous	100	34.5	190	65.5	----	----	----	----	----	----	0.65(0.47)
5-Worry	45	15.5	243	83.8	2	0.7	----	----	----	----	0.85(0.37)
6-Want to be alone	49	16.9	228	78.6	13	4.5	----	----	----	----	0.87(0.44)
7-Laugh it off, figuring that things could be worse	10	3.4	178	61.4	102	35.2	----	----	----	----	1.31(0.53)
8-Try to put the problem out of your mind	7	2.4	130	44.8	153	52.8	----	----	----	----	1.50(0.54)
9-Daydream , fantasizes	180	62.1	37	12.8	73	25.2	----	----	----	----	0.63(0.85)
10-Get prepared to expect the worst	90	31.0	158	54.5	42	14.5	----	----	----	----	0.83(0.65)
11-Get mad curse, swear	276	95.2	12	4.1	2	0.7	----	----	----	----	0.55(0.25)
12-Cry , get depressed	191	65.9	96	33.1	3	1.0	----	----	----	----	0.35(0.49)
13-Go to sleep , figuring things will look better in the morning	10	3.4	234	80.7	46	15.9	----	----	----	----	1.12(0.42)
14-Don't worry about it everything will probably work out fine	----	----	111	38.3	176	60.7	2	0.7	1	0.3	1.63(0.51)
15-Work off tension with physical activity	13	4.5	72	24.8	196	67.6	9	3.1	----	----	1.69(0.60)
16-Take out your tension on someone or something else	208	71.7	59	20.3	22	7.6	1	0.3	----	----	0.36(0.63)
17-Drink alcoholic beverages	172	59.3	111	38.3	7	2.4	----	----	----	----	0.43(0.54)
18-Resign yourself to the situation because things look hopeless	49	16.9	132	45.5	107	36.9	2	0.7	----	----	1.21(0.72)
19-Do nothing in the hope that the problem will take care of itself	19	6.6	79	27.2	180	62.1	12	4.1	----	----	1.63(0.66)
20-Resign yourself to the situation because it's your fate	2	0.7	67	23.1	187	64.5	34	11.7	----	----	1.87(0.60)
21-Blame someone else for your problem	34	11.7	195	67.2	55	19.0	3	1.0	----	----	1.12(0.65)
22-Meditation, yoga, biofeedback	1	0.3	99	34.1	177	61.0	10	3.4	----	----	1.70(0.58)
23-Take drugs	8	2.8	195	67.2	71	24.5	16	5.5	----	----	2.32(0.62)
24-Seek comfort or help from family or friends	----	----	10	3.4	102	35.2	151	52.1	27	9.3	2.67(0.69)
25-Withdraw from the situation	25	8.6	227	78.3	33	11.4	5	1.7	----	----	1.06(0.51)



**Table 5** Shows the distribution of the studied elderly patients with chronic liver cirrhosis according to frequency of using affective oriented coping behaviors. It was observed that, the statement that denotes "pray and trust in god", had the higher mean score (x (SD)=3.32(0.59)) ,The statements that denote " Hope that things will get better"

had mean scores of (X (SD)=2.87(0.69)). On the other hand , the less frequently used affective oriented coping behaviors was "cry and get depressed" with a mean score of (X(SD)=0.35(0.49)), The statements that denote "Take out your tension on some one or something else" took a mean scores of (X(SD)=0.36(0.63)).

**Table 6:** Distribution of the studied elderly patients with chronic liver cirrhosis according to frequency of using problem oriented coping behaviors

Coping behaviors	N = 290										Mean (SD)
	Never used		Occasionally		About half the time		Often		Always		
	No	%	No	%	No	%	No	%	No	%	
1-Try to maintain some control over the situation	2	0.7	242	83.4	38	13.1	5	1.7	3	1.0	1.18(0.51)
2- Find out more about the situation so you can handle it better	----	----	219	75.5	61	21.0	9	3.1	1	0.3	1.28(0.53)
3-Think through different ways to handle the situation	----	---	166	57.2	110	37.9	14	4.8	----	----	1.47(0.58)
4-Look at the problem objectively	----	----	132	45.5	141	48.6	16	5.5	1	0.3	1.60(0.60)
5-Try out different ways of solving the problem to see which works the best	----	----	95	32.8	183	63.1	12	4.1	----	----	1.71(0.53)
6- Draw on past experience to help you handle the situation	----	----	76	26.2	176	60.7	31	10.7	7	2.4	1.89(0.67)
7- Try to find meaning in the situation	----	----	89	30.7	155	53.4	46	15.9	----	----	1.85(0.66)
8- Break the problem down into smaller pieces	----	----	93	32.1	142	49.0	55	19.0	----	----	1.86(0.70)
9-Set specific goals to help solve the problem	----	----	99	34.1	98	33.8	92	31.7	1	.3	1.98(0.82)
10- Accept the situation as it is	1	0.3	86	29.7	85	29.3	112	38.6	6	2.1	2.12(0.87)
11- Talk the problem over with someone who has been in the same type of situation	----	----	58	20.0	69	23.8	143	49.3	20	6.9	2.43(0.88)
12- Actively try to change the situation	---	----	70	24.1	65	22.4	130	44.8	25	8.6	2.37(0.94)
13- Settle for the next best thing	6	2.1	78	26.9	58	20.0	116	40.0	32	11.0	2.31(1.04)
14- Do anything just to do something	216	74.5	53	18.3	8	2.8	11	3.8	2	0.7	0.37(0.77)
15- Let someone else solve the problem	18	6.2	39	13.4	107	36.9	70	24.1	56	19.3	2.36(1.12)

**Table 6 :** Shows the distribution of the studied elderly patients with chronic liver cirrhosis according to frequency of using problem oriented coping behaviors It was noticed that, the statement that denotes "Talk the problem over with someone who has been in the

same type of situation", had the higher mean score(X(SD)=2.43(0.88)) , the less frequency used problem oriented coping behaviors was"do any thing just to do something", the mean score was (X(SD)=0.37(0.77)).

**Table 7 :** Correlation between psychological health status ,functional status and coping behaviors either affective oriented or problem oriented in the studied elderly patients with chronic liver cirrhosis.

Items	Functional status	Anxiety level	Depression level	Affective oriented coping behaviors	Problem oriented coping behaviors
Functional status	----	r = 0.850 p = 0.000*	r = 0.844 p = 0.000*	r = 0.368 P = 0.000*	r = 0.045 0.440 =p
Anxiety level	r = 0.850 p = 0.000*	----	r = 0.897 p = 0.000*	r = 0.351 p = 0.000*	r = 0.155 p = 0.008*
Depression level	r = 0.844 p = 0.000*	r = 0.897 p = 0.000*	----	r = 0.283 p = 0.000*	r = 0.092 p = 0.120
Affective oriented coping behaviors	r = 0.368 P = 0.000*	r = 0.351 p = 0.000*	r = 0.283 p = 0.000*	----	r = 0.140 p = 0.007*
Problem oriented coping behaviors	r = 0.045 r = 0.440	r = 0.155 p = 0.008*	r = 0.092 p = 0.120	r = 0.140 p = 0.007*	----

\*Significant  $P \leq 0.05$

**Table 7** shows the correlation between the psychological health status (anxiety and depression score), functional status (Barthel score), and coping behaviors either affective oriented or problem oriented in elderly patients with chronic liver cirrhosis. The table showed a strong positive correlation between functional status, psychological health status (anxiety, and depression score), and total affective coping behavior for elderly patients with chronic liver cirrhosis ( $P = 0.000^*$  for all). Also the table showed a strong positive correlation between anxiety level, depression level ( $P = 0.000$ ), and coping behaviors (affective oriented  $P = 0.000$ , problem oriented  $P = 0.008$ ). More over, the table shows a strong positive correlation between the total depression and affective coping behaviors in elderly patients with liver cirrhosis ( $P = 0.000$ ). There were statistical significant correlation was found between total affect coping behavior and total problem coping behavior ( $P = 0.007$ ).

## V. Discussion

Regarding demographic characteristics of the elderly patients with chronic liver cirrhosis. The present study revealed that, the mean age of elderly patients were  $68.52 \pm 2.92$ . These results are supported by **Farag, (2006)** who mentioned that the most affected patients with chronic liver cirrhosis were in sixth decade. More than half of elderly patients with liver cirrhosis were males because the most of males is smokers. this result is supported by **Bajaj & Sanyal, (2010)**. More ever, more than half of the study patients were married, and have mid- education (read/write). Regarding occupation, it was observed that, more than three quarter of the study patients work without any effort (very simple work with simple salary), these factors showed dealing of elderly patients with their disease in the future. These results are in agreement with **Farag, (2006)**, who mentioned that there was a relation between age, social status, gender, cirrhosis incidence, as well as with practices daily care and healthy behaviors in elderly patient life.

Regarding residence of cirrhotic elderly patients , the study showed that more than half of the study subjects lived in rural areas. This result is supported by **Pybus et,al., (2006)** who revealed that in Egypt the rural areas have the highest prevalence of hepatitis C virus and liver cirrhosis than residences of urban areas and this result is in contrast with **Farag, (2006)** who revealed that, the most affected patients with liver cirrhosis lived in rural areas, due to lack of care with patients, problems in education and economical status. Concerning the causes of hospitalization for cirrhotic elderly patients , less than one fourth of the study subjects entered the hospital with jaundice, followed with edema and abdominal distention due to ascites . These results are supported by **Mahta& Rothstein, (2009)**, who revealed that, cirrhosis is the end result of chronic liver disease, because it is a serious condition that cause a lot of complication as ascites, hematemesis, portal hypertension and hepatic encephalopathy.

In relation to history of family history about liver disease , more than half of the study subject had one of their family suffer from liver disease, this result is in agreement with **Thompson, (2006)**, who revealed that liver cirrhosis is one of the hereditary diseases , due to lack of education for chronic diseases and should do check up on elderly persons continuously. Also, it was observed that, more than half of the study patient had a history of blood transfusion, this result is supported by **Silberbogen et al., (2009)** who reported that blood contact is a cause to infection transmission as HCV, due to lack of knowledge and health education about infection that cause a lot of diseases. So elderly patients should exercise on health education and protection from infection,

and the elderly patients should take precautions when sharing personal items such as razors and nail clippers.

Regarding history of schistosomiasis infection in elderly cirrhotic patients, the results of study found that more than half of the study patients have schistosomiasis infection history. This result is contradicted with the result of **Abd Elmonem et, al., (2006)** , who revealed that hepatitis c virus is a major etiological agent for chronic liver cirrhosis. This result mean that, schistosomiasis is a major cause agent for chronic liver cirrhosis.

Anxiety and depression are the most common problems and impacts in the elderly patients with chronic liver cirrhosis and their families. The recent study of patient showed founding high level of depression and anxiety show fearing of future , coping with situation , problems in health promotion and quality of life and responsibility and dealing with tasks at home , these results are in agreement with **Stenberg et al, (2010)** who revealed that, these situations with cirrhotic elders seen as stressors affect the caring situation and introducing education for elders.This because anxiety and depression affect emotional status, functional status, and daily activities of elderly patients.

Functional status is connected with chronic liver diseases in elderly patients,due to dependence of elders on others. the present study revealed that, independent cirrhotic elderly patients was higher than dependent cirrhotic elderly patients .The results also showed that, cirrhotic elders affected by disease and its symptoms in daily activities and daily tasks, and affected by emotional stress and psychological status. These results are in agreement with **Dumont et al, (2006)** in Canada who reported that,

emotional stress and psychological status due to disease is associated with patients' functional activities, due to dependence of cirrhotic elders on their families in daily needs and functional activities every day and can cause psychological problems and bad emotions for elderly patients.

In the present study, there was a statistical significant correlation was found between anxiety, depression, functional status, and affective coping behaviors in cirrhotic elders . In Canada the study done by **Dumonnet et al ,(2006)** in which elders' psychological stress(anxiety and depression) was significantly correlated with functional performance and daily activities. This study showed that there is a statistical significant relation between affective oriented coping behaviors and problem oriented coping behaviors. It may be related to that, each affective oriented and problem oriented coping behaviors complement each other. These results was reported by **Fadila ,(2007)**, a study done in Egypt who found that there was a statistical significant relation between affective oriented and problem oriented coping behaviors.

#### **IV. Conclusion**

The prevalence of liver cirrhosis disease was high and there was negative effects on wellness of elderly patients as dealing with functional and daily tasks, dealing with problems and crisis, affect effort in work, un sufficient income, and a lot of burdens, anxiety and depression. Elders' income ,working condition, functional status, and comorbidities were the main factors affecting their psychological health negatively, and their emotional status.

#### **VII. Recommendations**

Providing and developing educational programs for elderly patients

about chronic liver cirrhosis and adjustments with this disease. This programs should be implemented in the elderly homes and elderly clubs to improve their knowledge and practices. The finding of this study can be used as a data base for further research on health-promoting behaviors of elderly patients.

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