Therapeutic Regimen Adherence among Elderly Diagnosed with Chronic Hepatitis C Virus and Virological Outcome

Thesis

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By

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ABSTRCT

Background: Chronic hepatitis C virus infection is one of the major causes of morbidity and mortality among elderly in the world. **Aim:** The current study aim to assess therapeutic regimen adherence among elderly diagnosed with chronic hepatitis C virus and virological outcome. **Research design**: Descriptive research design was used. **Setting**: The study was conduct at Outpatient Viral Hepatitis Unit at General Hospital in Fayoum Governorate. **Sample**: Purposive sample composed of 274 elderly diagnosed with chronic hepatitis C undergoing direct acting antiviral treatment. **Tool**: Consist of five parts- I: demographic characteristics, II: past and current medical history, III: virological outcome, IV: elderly adherence to therapeutic regimen, V: factors affecting elderly adherence to therapeutic regimen. **Results:** The result of the present study revealed that 51.8%, 34.3% and 13.9% respectively had high, moderate and low adherence to medication, total adherence to follow up, diet and exercise regimen represented 65.7%, 45.3% and 51.8% respectively, 90 % of elderly had virological response after course treatment. **Conclusion** : The present study concluded that there was positive significant relation between therapeutic regimen adherence and virological outcome and there were many factors had high affect adherence to therapeutic regimen such as age, educational level, poor knowledge, social, disease and medication therapy factor so this study **Recommendation**: Develop an education program for elderly to increase knowledge, improve adherence and maintain high sustain virological response and apply further research in other setting for general

Keywords: Elderly, Chronic hepatitis C virus, Therapeutic regime Adherence and Virological outcome**.**

Summary

Introduction

Globally, in 2015, an estimated 71 million people living with chronic hepatitis C infection (CHC) and one of the major globally cause of death and morbidity in the last decade in the worldwide **(WHO,2017).** hepatitis C means as blood born infection transmitted through exposure to infected blood and can't be spread through intact skin or mucous membranes ,There are six major HCV genotypes with several subtypes being described, this is mainly due to the mortality in the older age groups who have the highest prevalence of infection in 2013 **(Elgharably et al., 2017).**

Aim of the study

The study aim to assessment of therapeutic regimen adherence among elderly diagnosed with chronic hepatitis C virus and virological outcome. **Through the following objectives.**

▪ Assessing hepatitis C virus elderly adherence to therapeutic regimen.

▪ Assess effect of adherence to therapeutic regimen on virological outcome.

▪ Assess the factors affecting adherence to therapeutic regimen.

Research Questions:

Q1- Is there relation between therapeutic regimen adherence and factor affecting to therapeutic regimen?

Q2- Is there relation between therapeutic regimen adherence and virological outcome?

Setting:

The study was conducted at Outpatient Viral Hepatitis Unit, Fayoum General Hospital in EL-Fayoum Governorate**.**

Study subjected: Purposive sample was used in this study to choose 274 diagnosed elderly with chronic HCV from the beginning of the treatment period until completion it.

Tool for data collection: The data were collected by using the following tool:

An interviewer questionnaire from: it consists of five parts

Part I- Demographic characteristics:

Used to assess demographic characteristic of study sample such as; age, gender, marital status, level of education, occupation.

Part II - Past and current medical history for elderly diagnose with chronic hepatitis C virus: Such as prescribed treatment regimen.

Part III - Virological outcome to assessment virological outcome before, during and after treatment such as the quantitative of hepatitis C virus in blood before adherence to therapeutic regimen**.**

Part IV- Elderly adherence to therapeutic regimen includes:

A- Morisky medication adherence scale to assess adherence to medication. This scale adopted from **(Morisky et al., 2014).** Such as sometime forget to take medication.

B- Behavioral adherence (diet, exercise and follow up) questionnaire developed by investigators based on reviewing related literature.

Part IIV– Factors affecting elderly adherence toward therapeutic regimen such as elderly factors, medication therapy factor, disease factor, social and health care system factor.

<u>Scores</u> were calculated by giving correct or staisfy response (1) and incorrect or unsatisfied response was given (zero). Score was calculated for each domain. Scores of the Morisky Medication Adherence Scale range from 0 to 8, scores < 6 considered low adherence, scores ≥ 6 - < 8 represented medium adherence and scores equal 8 represented high adherence but in behavioral therapy (diet, exercise and follow up) classified according to more than 80% of points to be classified into adherence or non-adherence. Regarding factors scores was classified according to median point or 50%, factor was ≥ 50 % considers high contributing factor. And factor was < 50% considers low contributing factor. Comparison of variables between groups was done using chi-square test. P-value equal and less than 0.05 was considered statistically significant.

❖   **Results:**

The result of the present study could be summarized as following:

▪ 81% of the elderly population ranged from 60 - 69 years, 58% of them was female and 59.1% of elderly live in rural area in addition 51.5 of them was illiterate and 45.6% of elderly was married but 82.1% not be working.

▪ 61.3% of elderly don't know onset of disease and 66.4% detected disease by investigation 54.7% of them depended on only medication treatment and 42.7% of them depended on medication, diet and exercise.

▪ Before treatment 274 of elderly subjects had positive hepatitis C divided into 72.2% of elderly had high titer above 1000 000 while 25.2% of elderly had moderate titer 200 000 - 1000 000 IU/L and 2.6% had low titer 16- 200 000 IU/L, but 30.3% of elderly become negative during treatment period or after first dose of treatment while 90% of elderly become negative after complete period of treatment.

▪ 51.8% of elderly patient had high level adherence to medication according for Morisky scale, 34.3% of elderly had moderate level of adherence and 13.9% of them had low level of adherence to prescribed medication regimen.

▪ 65.7% of elderly patient had total adherence to follow up, 51.8% of them had adherence to exercise, 45.3% of them had total adherence diet and 64.2% of them had adherence to total behavioral adherence.

- 80.3% of total studied subjects had poor knowledge and 15.7 % of subjects had fair knowledge and 4% of them had good knowledge about hepatitis C.
- 94.9 % of studied subjects had internal desire to complete treatment.
- 92.8% of studied subjects thought that smoking didn't affect therapeutic regimen adherence.
- 93.4% of studied subjects didn't have chronic disease affect your adherence.
- 69.7% of studied subjects had total social support.
- 63.9% of studied subjects had total medication therapy fact
- 93.45% of studied subjects had total health care system factor
- There were statically significant relationships between some elderly demographic characteristics such as age, level of education and level of therapeutic regimen adherence.
- There was positive significant relationship between social factor and level of adherence to therapeutic regimen.
- There were negative significant relationship between poor knowledge, therapy, disease factor and level of adherence to medication regimen.
- There were negative significant relationships between poor knowledge, therapy factor and level of adherence to behavioral regimen (diet, exercise and follow up).
- There were positive significant relationships between level of adherence to therapeutic regimen and virological outcome.

❖ Conclusion:

Based on the results of the present study and research question the following conclusion includes:

There was positive significant relation between level of adherence to therapeutic regimen and social factor, high education level and virological out com while there was negative significant relation between adherence to therapeutic regimen and poor knowledge, medication therapy factor and disease factor.

❖ Recommendations:

Based on the results of the present study and research question the following recommendations are suggested:

1-Periodic health education programs for chronic hepatitis C elderly patient and their family including nature of disease, therapeutic regimen, how to manage side effect of medication and how family provides social support for elderly with chronic hepatitis C.

2-.Periodic health education programs for geriatric nurse about chronic hepatitis C and how to delay with elderly with chronic hepatitis C.

3- Apply further research in other setting for generalizatio