

Knowledge, Practice and Satisfaction of Clients with Hepatitis C Virus Regarding Sovaldi Therapy

Thesis

*Submitted in Partial Fulfillment of Master Degree
in "Community Health Nursing"*

By

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List of Abbreviations

Abb.	Full term
AASLD	American Association for the Study of Liver Diseases
ALT	Alanine Transaminase
ASHM	Australasian society for HIV, viral hepatitis and sexual health medicine
AST	Aspartate Transaminase
CBC	Complete Blood Count
CDC	Center for Disease Control
CLD	Chronic Liver Disease
DAA	Direct Antiviral Agents
EASL	European Association for the Study of the Liver
ECG	Electro-Cardio-Graphy
EDHS	Egypt Demographic and Health Surveys
FDA	Food and Drug Administration
HBA1C	HemoglobinA1C
HBV	Hepatitis B Virus
HCC	Hepatocellular Carcinoma
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
IDSA	Infectious Diseases Society of America
IDUs	Injection Drug Users
INR	International Normalized Ratio
IV	Intra Venous

Abb.	Full term
MOHP	Ministry of Health and Population
NCCVH	National Committee for the Control of Viral Hepatitis
NGOs	Non -Governmental Organizations
NSAIDs	Non-Steroidal Anti-Inflammatory Drugs
PAT	Parenteral Antischistosomal Therapy
PCR	Polymerase Chain Reaction
POA	Plan of Action for the Prevention, Care & Treatment of Viral Hepatitis
RNA	Ribo-Nucleic Acid
SVR	Sustained Virologic Response
WHO	WorldHealth Organization

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Abstract

The introduction of sovaldi combination therapy marked the beginning of a new era in HCV treatment in Egypt, which is highly-effective with cure rate over 90% as a part of MOHP efforts to eliminate the morbidity and mortality resulting from its prognosis and to control the viral hepatitis epidemic. **Aim of the study:** was to assess knowledge, practice and satisfaction of clients with hepatitis c virus regarding sovaldi therapy. **Design:** descriptive research design was utilized to carry out this study. **Setting:** The present study was conducted at the liver center in banha city. **Sample:** purposive sample including 290 clients with hepatitis c virus at the liver center in banha city. **Tools:** an interviewing questionnaire was used, it divided into four main parts: **Part 1:** Socio-demographic characteristics and medical data, **Part 2:** client knowledge regarding sovaldi therapy, **Part 3:** client practices regarding sovaldi therapy, **Part 4:** client satisfaction regarding the provided care. **Results:** this study indicated that, mean age for study subjects was 35.23 ± 11.58 , 67.6% of them were male, 71.3% of the study subjects had unsatisfactory level of knowledge regarding HCV and sovaldi combination therapy, 31.4% of the study subjects had satisfactory practices regarding sovaldi combination therapy; 69.7% were unsatisfied from the quality of care provided. The current study **concluded that** there was positive correlation between their knowledge, practices and satisfaction. Based on this finding, the investigator **recommended to** carry out health education sessions regarding their practices toward sovaldi administration, proper nutrition, the restricted medication during treatment.

Key words: hepatitis C virus, Sovaldi therapy.

Introduction

Hepatitis C virus (HCV) infection is recognized as a major global public health problem, globally it has been estimated that 130-150million individuals are chronically infected with HCV and that it contributes to 500 000 deaths annually, the prevalence of HCV was estimated to be 2% worldwide **(Al-Raddadi et al., 2017)**.

With the highest prevalence observed in Egypt 7.3% in 2013 with predominance of genotype 4, HCV infection can progresses to chronicity in 70% of cases if left untreated, 14% to 45% of patients develop liver cirrhosis 20 years after acquisition of disease and 1–5% will develop liver cancer, worldwide approximately 27% of chronic liver cirrhosis and 25% of hepatocellular carcinoma can be attributed to viral hepatitis **(Seida et al., 2017)**.

Optimal therapy for clients with hepatitis C virus genotype 4 infection is changing rapidly; the previous standard of care for a long time has been a combination of pegylated interferon (PEG-IFN) and ribavirin for 48 weeks has been limited by both eligibility and tolerability, with response rates of 40%-69%,major changes have emerged during the last few years in the therapy of clients with chronic HCV, several direct acting antiviral agents

(DAAs)including Sovaldi have been developed showing potent activity with higher rates of sustained virological response (SVR), even in difficult-to-treat clients **(Eleatreby et al., 2017)**.

Clients who are cured of their HCV infection experience numerous health benefits, including a decrease in liver inflammation; more than 70% reduction in the risk of liver cancer (hepatocellular carcinoma [HCC]) and a 90% reduction in the risk of liver-related mortality and liver transplantation, these reductions in disease severity contribute to dramatic reductions in all-cause mortality, furthermore, clients who achieve sustained virologic response have a substantially improved quality of life, which spans their physical, emotional, and social health **(The American Association for the Study of Liver Disease, 2017)**.

Between 65% and 75% of patients with chronic HCV infection are unaware of their infection, representing the single greatest barrier to treatment, furthermore, among infected or at-risk persons, knowledge related to HCV is poor, confusion regarding modes of transmission, disease complications and interpretation of HCV screening tests is common; these deficiencies may contribute to missed

treatment opportunities, continued transmission and poorer health outcomes **(McGowan et al., 2012)**.

Community health nurses play an important role in the management and care of clients with hepatitis C receiving sovaldi combination therapy they provide education about: the disease and its prevention; educate against behaviors' that risk reinfection and transmission to others; identify and address any modifiable risk factors lifestyle and psychosocial factors; educate about treatment and assess the client's desire for treatment; support during treatment; ensure referral to a specialist for hepatitis C treatment; ensure monitoring for occurrence of complications during and after treatment; determine the client's need for support services; evaluate and facilitate resources and referral to support services**(Australasian society for HIV, viral hepatitis and sexual health medicine, 2012)**.

Also assessing client's satisfaction is important in evaluating whether clients' needs are fulfilled and subsequently facilitating in the planning as well as implementing appropriate nursing interventions for clients, determining factors contribute most to client's satisfaction can further assist nurses in improving the quality of nursing care **(Mohamed et al., 2015)**.

Significance of the study:-

Hepatitis C Virus (HCV) infection is a major global health challenge; it is estimated that more than 80 million people are chronically infected worldwide, with 3–4million new infections and 350 000 deaths occurring each year because of HCV-related complications; Egypt is the country with the highest HCV prevalence in the world, according to the Egypt Demographic and Health Surveys (EDHS) which measured antibody prevalence among the adult population aged 15–59 years at 14.7%in 2009 and at 10.0% in 2015 substantially higher than global levels **(Kandeel et al., 2017)**.

The recent development of highly efficacious oral direct-acting antivirals (DAAs) provides opportunities for reducing HCV disease burden and its onward transmission, with the potential for eliminating this blood-borne virus as a public health concern **(Abu-Raddad et al., 2018)**.

According to **(Esmat, 2017)** the number of HCV clients who registered online for appointments till end of 2016 was 1551718 client and the number of HCV clients who treated by DAA in Egypt in the period from 11/2014 to 12/2016 was 942000 client.