

# Why and How? Hepatitis C Infection Become a Common Issue Among Hemodialysis Patients in a Hemodialysis Center Jakarta, Indonesia and A Comparison of Survival Percentage of Those Hemodialysis Patients with Hepatitis Infection Between Two Hemodialysis Centers in Jakarta, Indonesia and Penang, Malaysia

Diana Laila Ramatillah

University August 17, 1945, Indonesia

## Abstract:

Hepatitis C is an irresistible malady brought about by the hepatitis C infection (HCV) that principally influences the liver; [2] it is a sort of viral hepatitis. [7] During the underlying contamination individuals regularly have mellow or no symptoms. [1] Occasionally a fever, dull pee, stomach agony, and yellow touched skin occurs. [1] The infection endures in the liver in about 75% to 85% of those at first infected. [1] Early on interminable contamination normally has no symptoms. [1] Over numerous years in any case, it frequently prompts liver illness and periodically cirrhosis. [1] now and again, those with cirrhosis will create genuine entanglements, for example, liver disappointment, liver malignant growth, or enlarged veins in the throat and stomach. [2]

## Introduction:

HCV is spread basically by blood-to-blood contact related with intravenous medication use, inadequately cleaned clinical gear, needlestick wounds in medicinal services, and transfusions. [1][3] Using blood screening, the hazard from a transfusion is short of what one for each two million. [1] It might likewise be spread from a tainted mother to her infant during birth. [1] It isn't spread by shallow contact. [4] It is one of five known hepatitis infections: A, B, C, D, and E. [8] Diagnosis is by blood testing to search for either antibodies to the infection or its RNA. [1] Testing is suggested in all individuals who are at risk. [1]

There is no immunization against hepatitis C. [1][9] Prevention incorporates hurt decrease endeavors among individuals who utilize intravenous medications and testing gave blood. [4] Chronic disease can be restored over 95% of the time with antiviral drugs, for example, sofosbuvir or simeprevir. [6][1][4] Peginterferon and ribavirin were prior age medicines that had a fix pace of under half and more prominent side effects. [4][10] Getting access to the more up to date medicines anyway can be expensive. [4] Those who create cirrhosis or liver malignant growth may require a liver transplant. [5] Hepatitis C is the main explanation behind liver transplantation, however the infection for the most part repeats after transplantation. [5]

An expected 71 million individuals (1%) overall are contaminated with hepatitis C as of 2017. [6] In 2013, around eleven million new cases occurred. [11] It happens most generally in Africa and Central and East Asia. [4] About 167,000 passings because of liver disease and 326,000 passings because of cirrhosis happened in 2015 because of hepatitis C. [12] The presence of hepatitis C – initially recognizable just as a sort of non-A non-B hepatitis – was

recommended during the 1970s and demonstrated in 1989. [13] Hepatitis C taints just people and chimpanzees. [14]

Hemodialysis, likewise spelled haemodialysis, or just dialysis, is a procedure of cleaning the blood of an individual whose kidneys are not working typically. This kind of dialysis accomplishes the extracorporeal evacuation of waste items, for example, creatinine and urea and free water from the blood when the kidneys are in a condition of kidney disappointment. Hemodialysis is one of three renal substitution treatments (the other two being kidney transplant and peritoneal dialysis). An elective strategy for extracorporeal division of blood segments, for example, plasma or cells is apheresis.

## Methods:

Hemodialysis can be an outpatient or inpatient treatment. Routine hemodialysis is directed in a dialysis outpatient office, either a reason manufactured room in a medical clinic or a devoted, independent center. Less much of the time hemodialysis is done at home. Dialysis medicines in a center are started and overseen by specific staff comprised of attendants and specialists; dialysis medicines at home can act naturally started and oversaw or done mutually with the help of a prepared partner who is generally a family member. [1]

Hemodialysis is the decision of renal swap treatment for patients who need dialysis intensely, and for some patients as upkeep treatment. It gives astounding, quick leeway of solutes. [2]

A nephrologist (a clinical kidney authority) chooses when hemodialysis is required and the different boundaries for a dialysis treatment. These incorporate recurrence (what number of medicines every week), length of every treatment, and the blood and dialysis arrangement stream rates, just as the size of the dialyzer. The organization of the dialysis arrangement is likewise in some cases balanced as far as its sodium and potassium and bicarbonate levels. When all is said in done, the bigger the body size of an individual, the more dialysis he/she will require. In North America and the UK, 3–4 hour medicines (in some cases as long as 5 hours for bigger patients) given 3 times each week are regular. Two times every week meetings are constrained to patients who have a considerable remaining kidney work. Four meetings for every week are frequently endorsed for bigger patients, just as patients who experience difficulty with liquid over-burden. At long last, there is developing enthusiasm for short day by day home hemodialysis, which is 1.5 – 4 hr meetings given 5–7 times each week, typically at home. There is additionally enthusiasm for nighttime dialysis, which includes dialyzing a patient, for the most part at home, for 8–10 hours out of each night, 3–6 evenings for every week. Nighttime in-focus dialysis, 3–4 times each week, is likewise offered at a bunch of dialysis units in the United States.

**Results:**

Isolation and using special hemodialysis machine are not necessary for hemodialysis patients who has been infected by hepatitis C viral from the association of Nephrologist in Indonesia (Pernefri) recommendation meanwhile Ministry of Health Malaysia gives recommendation that hepatitis C patients will be dialyzed in a separate room or a separate area with a fixed partition and dedicated machines. To identify the correlation between the recommendation which had been followed by two hemodialysis centers in different countries and the impact of that to the hepatitis C infection issue.

**Discussions:**

A cohort prospective and retrospective study was done in this research. The study included hemodialysis patients who had followed up for 9 months and who died in last 5 years. Universal sampling were used to select the inclusion criteria. There was a significance relationship between HCV first checked and HCV second checked among 9 months followed up hemodialysis patients in HD center Jakarta, Indonesia.

**Conclusions:**

The total number of patients who had hepatitis C in the second checked increased around 30% of total hemodialysed patients who infected HCV in the first check in this HD center. Besides, provide special hemodialysis rooms and machines for hemodialysis patients with hepatitis C, minimizing blood transfusion to the patients on hemodialysis is important to reduce the chance for the patients to get hepatitis C and to increase the percentage of the survival.

**Keywords:** Hepatitis C, Hemodialysis, Indonesia, Malaysia