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CHARACTERISTICS OF PATIENTS WITH LOW HEPATITIS C TREATMENT RATES IN URBAN MEDICAL CENTER CLINICS

Rana Khamis

Wayne State University School of Medicine, rana.khamis@wayne.edu

Crishy Auguste

Wayne State University School of Medicine

Paul H. Naylor PhD

Wayne State University School of Medicine, Division of Gastroenterology

Milton G. Mutchnik MD

Wayne State University School of Medicine, Division of Gastroenterology

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Abstract

CHARACTERISTICS OF PATIENTS WITH LOW HEPATITIS C TREATMENT RATES IN URBAN MEDICAL CENTER CLINICS

Rana Khamis, Crisshy Auguste, Paul Naylor, and Milton Mutchnick

Background: To effectively eliminate Hepatitis C Virus (HCV), evidence-based research to identify areas where intervention is needed is essential. The objective of this study was to determine whether there were characteristics that were different between HCV patients who were treated and those not treated after their first visit to a Gastroenterology (GI) or Infectious Disease (ID) clinic. The hypothesis was that this information might identify potential targets for remedial actions which could be performed to increase the number of treated patients.

Methods: Data was collected from 2019 HCV patient EMR charts including patient demographics, treatment history, and laboratory studies. We defined success as receiving treatment by July 2020 (6-18 months after first visit).

Results: In 2019, 587 patients with HCV were seen at least once in the Wayne Health Clinic System. Of the 441 patients who were not yet treated ($441/587 = 75\%$), only 189 ($189/441 = 43\%$) were treated by July 2020. With respect to treated vs not treated HCV patients, age, race, and gender were not independent factors for treatment (Table 1). Treated and not treated HCV patients were also not different with respect to the clinic where seen (GI vs ID), the type of insurance, and median income as defined by zip code. The degree of fibrosis (assessed by APRI and FIB-4) was not different between treated and not treated patients. This suggests that fibrosis assessment did not impact treatment decisions and that delaying treatment for fibrosis assessment was not needed. Patients with an average of 4 visits were more likely to be treated than those with 2 and having 1 visit one visit with no follow-up was the most dramatic factor for patient treatment (42% vs 8% $p < 0.0001$). PCR available at first visit to confirm infection was an important factor with respect to treatment (treated 38% vs not treated 25% $p < 0.02$). Patients with a first visit early in 2019 were more likely to be subsequently treated than patients seen later despite the criteria of treatment being extended through the first 6 months of 2020 (Figure 1).

Conclusion: A significant number of patients were not treated after their initial HCV assessment visit. The primary reason for this was the failure to return after a first visit. We could not find any differences that predicted patients who would not be treated with exception for patients with PCR confirmation of infection at first visit. The decline in patient visits over 2019 and the fact that % treatment declined over time was unexpected and warrants further evaluation. Since the degree of fibrosis has no impact on treatment, initiating treatment immediately after confirming infection with HCV should improve patient outcomes.

Table 1 Comparison Between Treated and Not Treated HCV Patients

	Treated (n= 189)	Not Treated (n=252)	p value
AA	87%	84%	p<0.05
Male	67%	63%	p<0.05
Age (years)	61	60	
Seen by GI (vs ID)	74%	74%	p<0.05
APRI	0.59	0.69	p<0.05
FIB-5	2.20	2.59	p<0.05
Medicaid Insurance	55%	55%	p<0.05
Medicare Insurance	41%	37%	p<0.05
Commercial Insurance	2%	3%	p<0.05
Mean Income (\$)	38,781	38,414	p<0.05
Number of 2019 Visits	4	2	p<0.0001
Only 1 Visit in 2019	5%	45%	p<0.0001
PCR at First Visit	38%	25%	P< 0.018

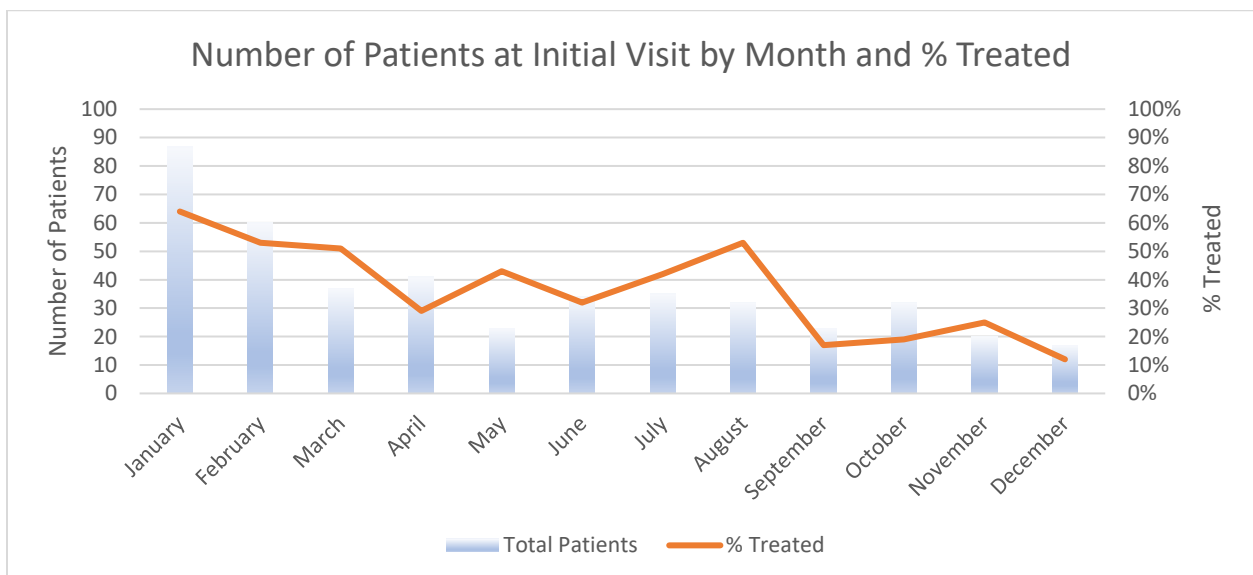


Figure 1 Patients seen each month and % treated. The number of not previously treated patients seen for a first visit each month is plotted by month on the left axis. The % of patients treated each month is plotted on the right axis and represented by the declining line.

