Evaluation of Socioeconomic Factors and Achievement of Sustained Virologic Response (SVR) in the Treatment of Hepatitis C Virus (HCV)

Erika Aldag, PharmD, BCPS1, Rachel Pedersen, BA1, Andrew Ackerman, PharmD Candidate1, Vikraman Gunabushanam, MD1, Ajay Sahajpal, MD1, Siddesh Besur, MD1
1Aurora St. Luke’s Medical Center, Milwaukee, WI

Background
- Current guidelines recommend newer direct acting antiviral therapies over previous interferon-based treatments.
- It is unknown if socioeconomic factors affect achievement of sustained virologic response in the treatment of HCV.

Objective
- To evaluate the impact of socioeconomic factors in the treatment of HCV.

Methods
- HCV patients who had prescriptions filled between 1/1/2014 and 12/31/2015 were reviewed.
- A total of 348 received prescriptions during the timeframe. Fifteen (4.3%) were excluded due to de-enrolling from treatment.
- SVR was defined as first Not Detectable HCV Virologic Response (SVR) in the Treatment of HCV.
- Treatment end date was defined as 90 days post treatment regimen start date.
- Zip code was used as a marker of household income.
- Kaplan-Meier Method was used to examine SVR rates after medication regimen completion.

Results
- A total of 333 patients had prescriptions filled between 1/1/2014 and 12/31/2015 and subsequently completed treatment.
- The mean AST to Platelet Ratio Index (APRI) score, a measure that determines the likelihood of fibrosis/cirrhosis in patients with HCV was 1.4 ± 1.5 with 44% of the patients having an APRI Score > 1.0.
- The SVR rate at 6 months post medication completion was 87%. Rates were statistically significantly lower in those with Genotype 1A vs those of other genotypes (83% vs 94%, p=0.02).

Results Continued
- Side Effect rates were slightly higher in patients with genotype 2 or 3 vs others (26% vs 19%, p=0.09), and female patients (65% vs 54%, p=0.04).
- No other risk factors were statistically significantly associated with achievement of SVR post medication completion.

Conclusions
- In our patient population, we found that there were no socioeconomic factors statistically significantly associated with SVR post HCV treatment.
- Women indicated having side effects at a statistically significantly higher frequency compared to males.
- Patients with genotype 1A had statistically significantly lower SVR rates post medication completion compared to other genotypes.

References

Correspondence Andria Ackerman
Andrew.Ackerman@aurora.org
Pharmacy Department
2900 W Oklahoma Ave; Milwaukee WI 53215

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