Conclusions

• Although hepatologists, GIs, and IDs reported greater competence/practice performance in HCV management than other clinicians, there were still significant gaps in these three specialties.

• Since there are too few hepatologists to handle the expanding numbers of HCV patients,7 these findings indicate the need for education, especially for gastroenterologists and ID specialists, that addresses these gaps, which may lead to practice improvement among clinicians.

• Most pronounced were gaps in understanding current triple-therapy regimens, in managing the associated side effects of these agents, and especially in understanding emerging anti-HCV therapies. These gaps indicate a need for improved training of all clinicians who treat HCV patients in the use of these therapies — including hepatologists, GIs, and IDs.

• IMs, FP/PCPs, N/NPs, and PAs are the frontline clinicians in detecting HCV infection in the general public. Their self-reported lack of competence in assessing HCV risk factors in screening and evaluating patients underscores an important missed opportunity and a need for education.

• It is possible that the recent controversy over CDC recommendations vs US Preventive Services Task Force recommendations regarding birth cohort screening has resulted in some confusion.2,8

• The wide range of responses as to whether to wait until newer therapies are available reflects the many patient-specific variables involved in determining individual treatment, as well as considerable confusion/disagreement as to whom, when, and under what circumstances clinicians should treat immediately or postpone treatment.

• Despite the limitations of clinician self-assessment surveys, they have proven helpful in determining gaps in competence/practice performance such as those documented in this study.

References


Disclosure Information

Ira M. Jacobson, MD, has received pre/postresearch support from Anadys Pharmaceuticals Inc, Boehringer Ingelheim, Bristol-Myers Squibb, Glaxo Sciences, Inc, GlaxoSmithKline, Inc, Human Genome Sciences, Merck & Co, Inc/Schering-Plough, Novartis Pharmaceuticals Corporation, Pharmasset Pharmaceuticals Inc, Rosta/Sanofi, Tibotec; Pharmasset Pharmaceuticals Incorporated, and ZymoGenetics Inc; is a consultant for AbbVie, Boehringer Ingelheim, Bristol-Myers Squibb, Glaxo Sciences, Inc, GlaxoSmithKline, Inc, Human Genome Sciences, Merck & Co, Inc/Schering-Plough, Novartis Pharmaceuticals Corporation, Phizer Inc, Pharmasset Pharmaceuticals Inc, Rosta/Sanofi, Tibotec; Pharmasset Pharmaceuticals Incorporated, and ZymoGenetics Inc; and on the speakers bureaus of Bristol-Myers Squibb, Glaxo Sciences, Inc, Merck & Co, Inc/Schering-Plough, and Roche/Geneveth.

David R. Nelson, MD, has received grant/research support from AbbVie, Boehringer Ingelheim, Bristol-Myers Squibb, Genentech, Inc, Glaxo Sciences, Inc, Idenix Pharmaceuticals Inc, Kadmon Corporation LLC, Merck & Co, Inc, and Veltex Pharmaceuticals Incorporated.

Patty Peterson, CCMEP, has no significant relationships to disclose.

Elaine Rudell, CCMEP, has no significant relationships to disclose.

Introduction

• Approximately 3.2 million to 5.2 million individuals in the United States have chronic HCV infection.

• The CDC has now added the recommendation that all individuals born between 1945–1965 undergo one-time testing without prior ascertainment of HCV risk.8 These individuals account for an estimated 75% of all HCV infections in the country and 73% of HCV-associated mortality, and are at greatest risk for liver cancer and other HCV-related disease.3

• The majority of chronic HCV cases are asymptomatic and therefore go undiagnosed.4

• By 2019, patients with HCV-related diseases are expected to have increased to 626,500 with decompensated cirrhosis, 107,400 with compensated cirrhosis, and 23,800 with liver cancer.4

• Given the serious disease burden and increased mortality associated with chronic HCV infection, as well as the recent availability of new, more effective treatments for HCV infection, it is critical that clinicians be adequately trained in screening, preventing, diagnosing, treating, and monitoring this disease, and in educating patients and their families.

Methods

• Projects In Knowledge designed an online survey and emailed it on April 18, 2013, to a proprietary database of 6554 hepatologists, gastroenterologists, infectious disease specialists, and other clinicians involved in the care of patients with HCV.

• Clinicians were asked to self-assess whether they were highly, somewhat, or not at all competent with regard to specific topics, such as HCV risk factors/screening, factors affecting response to treatment, triple therapy and its use in difficult-to-treat populations, emerging treatments, and the link between HCV and HCC and/or cirrhosis.

• In addition, using a four-point scale ranging from always to never, they were asked about the degree to which they perform interventions in their practices.
Results

- Two hundred seventy-five of the 6554 healthcare providers responded, for a response rate of 4.2%.

- Hepatologists, GIs, and IDs are the physicians who are presumably the most knowledgeable about the treatment of HCV and are the thought leaders in this field; therefore, this analysis focuses on their responses to the questions on competence and practice performance.

- IMs, FP/PCPs, N/NPs, and PAs constitute the frontline clinicians for screening and detecting HCV infection; thus, their responses to the question on screening and monitoring are included along with responses from hepatologists, GIs, and IDs.

1. Can assess HCV risk factors in screening for HCV and can describe the importance of screening and monitoring patients at risk.
   - GIs and IDs felt less competent than hepatologists in assessing HCV risk factors.
   - Although 88% of GIs and IDs stated they felt Highly Competent in screening patients, only 56% and 75%, respectively, always did so.

2. Can discuss the importance of treating HCV due to the potential disease burden.
   - Compared to hepatologists and GIs, more IDs did not feel Highly Competent in discussing the importance of treating HCV to prevent HCV-related disease.

3. Can contrast how HCV genotypes/genetic variability and racial/ethnic host differences can affect response to antiviral treatment and alter the treatment outcome.

4. Can describe triple-therapy regimens in HCV and the MOAs, efficacy, safety, and stopping rules of approved protease inhibitors.
   - Hepatologists’ and GIs’ perception of their competence dropped noticeably when it came to assessing their ability to describe anti-HCV triple-therapy regimens.
   - Compared to GIs, a greater percentage of IDs rated themselves as Highly Competent in this area.

5. Can implement a plan for managing triple-therapy–related side effects for patients to ensure adherence to the medication regimen.
   - Despite the importance of managing side effects in facilitating treatment adherence, a surprising percentage of GIs and IDs stated that they were Not At All Competent in this area.
   - This was reflected in the relatively low percentages of GIs and IDs (59% and 65%, respectively) who always incorporate side effect management strategies in treating triple-therapy–related side effects in their practice.

6. Can discuss the MOAs, efficacy, and safety of emerging anti-HCV therapies, including nucleos(t)ide polymerase inhibitors, non-nucleoside polymerase inhibitors, NNSA inhibitors, protease inhibitors, and combinations.
   - Clinicians in all three specialties reported a lack of confidence in their understanding of emerging anti-HCV therapies, with ~one-third of the GIs and ~one-fifth of the IDs reporting that they were Not At All Competent in this area.

7. Can describe customized triple-therapy HCV regimens that include patients who are treatment-naïve, nonresponders, partial responders, and relapers.
   - Clinicians in these specialties lacked confidence in their ability to describe customized triple-therapy regimens that include treatment-naïve or hard-to-treat patients.

8. Wait to treat patients with HCV because emerging all-oral, interferon-free therapies in development (including nucleos(t)ide polymerase inhibitors, non-nucleoside polymerase inhibitors, NNSA inhibitors, protease inhibitors, and combinations) might offer a better therapeutic outcome.
   - IDs were far more likely to always wait to treat than were hepatologists and GIs.
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Elaine Rudell, CCMEP, has no significant relationships to disclose.

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Projects In Knowledge designed an online survey of healthcare providers involved in the screening, diagnosis, and treatment of patients with HCV.

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- The majority of chronic HCV cases are asymptomatic and therefore go undiagnosed.4
- By 2019, patients with HCV-related diseases are expected to have increased to 626,500 with decompensated cirrhosis, and 23,800 with liver cancer;5 73.5% of these new cases will be from patients without prior ascertainment of HCV risk.6 These individuals account for an estimated 75% of all HCV infections in the country and 73% of HCV-associated mortality, and are at greatest risk for liver cancer and other HCV-related disease.3
- Given the serious disease burden and increased difficulty to treat these populations, the recent availability of new, more effective treatments for HCV infection, it is critical that clinicians be adequately trained in screening, preventing, diagnosing, treating, and monitoring this disease, and in educating patients and their families.

- To assess the competence/practice performance of clinicians involved in diagnosing and treating chronic HCV and to guide future educational programs, Projects In Knowledge, a continuing medical education (CME) provider certified by the Accreditation Council for CME (ACCME), conducted an online survey of healthcare providers involved in the screening, diagnosis, and treatment of patients with HCV.

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