Interview

In the following interview, Nancy Reau, an experienced hepatologist, shares insights from her career specialising in complex liver disease. Reflecting on the changes she has observed in her journey to date, she provides her perspective on the likely future direction of this field.

Featuring: Nancy Reau

Nancy Reau

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Q1 Was there a particular event or person that inspired you to pursue a career in medicine?

My father always wanted me to be a doctor. He was a police officer and would come home late at night, talking about forensics and autopsies. My best friend in grade school had doctor parents, a neurologist and neurosurgeon. I think the cool magazines in their house and my father's enthusiasm piqued my interest in medicine. It wasn't until college, where I realised that my degree in neuroscience had limited job opportunities, that I truly decided to become a doctor. I haven't regrated that decision since.

Q2 What is it that interests you most and has led you to specialise in the treatment of complex liver diseases?

I was never going to be a very good primary care doctor. I always wanted to know everything about the condition in front of me and didn't want to transfer my patient to a subspecialist just when I thought I had an intervention to offer. Still, I really enjoyed helping people navigate a path toward health, transplant, or supportive care. When I first became interested in liver disease there weren't many therapeutic options other than transplant, but not everyone wants or is a candidate for this life saving therapy. Over my career, we have seen approval of therapies that can cure hepatitis C; We see an opportunity

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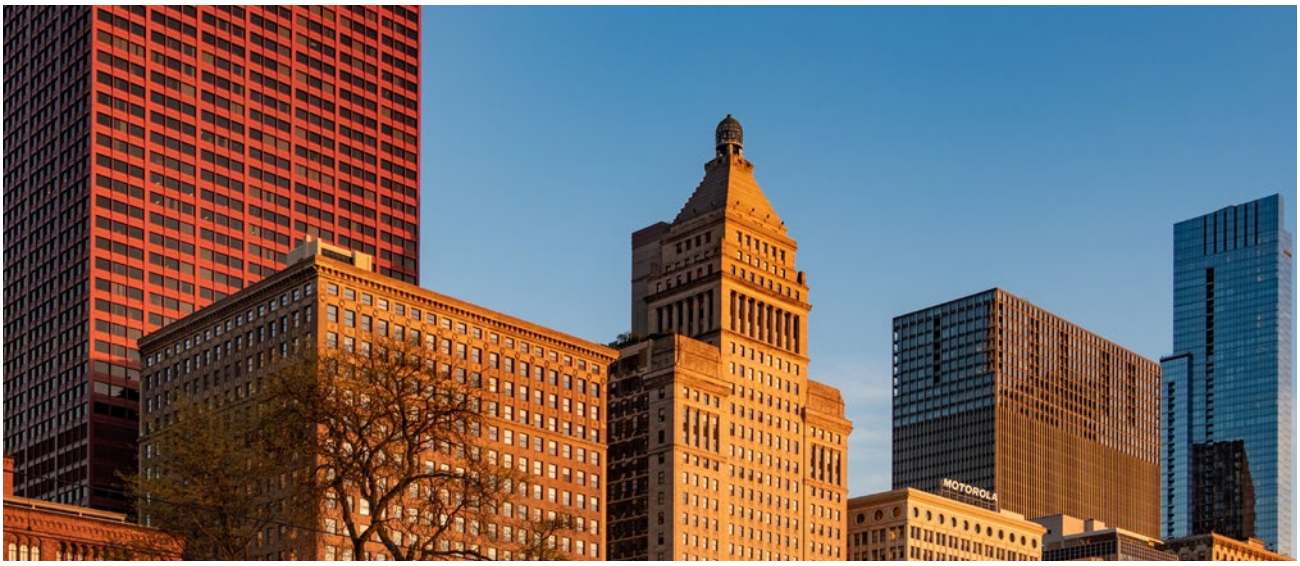

to offer finite therapy to those with hepatitis B; and we have seen an influx of individuals at risk for advanced liver disease from alcohol or non-alcohol associated liver disease, with an avalanche of potential therapeutics. The constantly evolving balance between serious disease and scientific innovation is the reason I am a liver specialist.

Q3 With over 15 years of experience in both hepatology and gastroenterology, what are the most significant changes you have observed in these specialties over the course of your career?

The conversation of cure. Rarely can you diagnose and then eradicate a disease that causes a chronic condition or illness. Given the amazing drug innovation with hepatitis C, this has challenged us with reimaging hepatitis B and D as curable.

When I was in training, if you wanted to know how diseased the liver was you had to obtain a liver biopsy. Now, with multiple reliable non-invasive options for fibrosis assessment; staging is rarely done with a liver biopsy.

The prevalence of liver disease, which used to be rare. Now one in four Americans have fatty liver disease from metabolic disease. Alcohol use disorder is increasing, along with liver related complications, and liver cancer rates continue to increase. Given these statistics, nearly every American is impacted by liver disease or are at risk of liver injury.

Q4 Having authored and co-authored more than 100 peer-reviewed articles and several books, which parts of your research do you feel have had the greatest impact on practice, and what are you most proud of?

It is rare to have a publication that impacts practice. However, I do think that recognising early treatment response and futility had a significant role in hepatitis C management when we were using pegylated interferon-based therapy. These rules may resurface with hepatitis D, or even in our non-alcoholic fatty liver disease (NAFLD) therapies when you want to minimise exposure to a futile therapy. Guidelines have a huge impact not just in practice management but by setting the standard of care. I was very fortunate to be one of the original authors on the American Association for the Study of Liver Diseases (AASLD) / Infectious Diseases Society of America (IDSA) hepatitis C guideline document. I also am an author and reviewer for UpToDate.[1] This platform is so widely used that you know the authors are impacting practice patterns.

Q5 Are there any innovative approaches/technologies for organ, and more specifically liver, transplantation you expect to transition into common practice in the future?

We need to optimise marginal organs. Our donors reflect the general populations, meaning that they are both older and impacted by metabolic diseases. Metabolic syndrome increases risk of

fatty liver disease; however, a liver with steatosis may not do well after liver transplantation. There are several exciting ideas on how to make these organs safer for transplant.

We are also seeing increased utilisation of organs that would have previously been considered high risk. Hepatitis B virus is controllable and Hepatitis C virus is curable. These organs are great options for some recipients.

I also think we need to find ways to use more of our organs that are donated after circulatory death. Cardiac death is very stressful for the liver, but not all organs perform badly. Finding a way to use this valuable resource without compromising the outcome is very important.

Lastly, until we have synthetic liver options. Living related donation should be increasing but remains a minority of our transplant population. This is a great alternative for individuals who are not severely sick but still need transplant.

Q6 Which topics within the field of hepatology do you feel warrant further study? Are there any gaps in literature you feel most urgently need to be addressed?

The obvious gap is identifying fatty liver disease from both metabolic syndrome/obesity and alcohol use disorder. I think the most important conversation centres around prevention. We need to identify those at risk and aggressively work to prevent, stabilise, and reverse their disease. There are also significant genetic risk factors. Our newest NAFLD guidelines recommend screening first degree relatives of those with NAFLD associated cirrhosis for fatty liver disease. This is incredibly important and under recognised.

Q7 What advice would you give a younger clinician, taking their first steps to become a practicing clinician and educator now?

Enjoy what you do but make sure it is part of your long-term vision. I'm lucky, I always seemed to be in the right place at the right time. I had amazing mentors and sponsors and it really felt like I was handed a gift when I was recognised for my expertise. You need to work hard, but you don't need to do everything that everyone wants you to do. That's where having a network is imperative. It's like tumour board. Sometimes the answer is easy, and you don't need the collaboration. But sometimes you need to bounce your ideas off your friends. You don't have to take their advice, but it really helps place the situation into context.

The other piece of advice I would offer, is rank your value. It is well established that females tend to make about 20 cents less per dollar than their male counter parts. But line up your priorities. If your salary is most important, you will be able to negotiate reimbursement that is equal to your peers (irrespective of gender). But, if flexibility in your schedule is more important, this might come at a financial cost. I was fortunate as my husband was also a doctor, so we didn't rely on my salary. But my husband was a surgeon, so when our children were small, we relied on my presence. I knew I was 'underpaid', but that was worth the flexibility in hours and call. By negotiating flexibility in my time, I was not only able to be with my children, but I also was able to do academic work that allowed me to be promoted in line with peers.

References

1. Wolters Kluwer. UpToDate. Available at: https://www.wolterskluwer.com/en/solutions/uptodate. Last accessed: 10 March 2023