Joint Efforts to Ensure Evidence-Based Decisions by Clinicians in Drug Adjustment for Chronic Liver Disease Populations

TO THE EDITOR:

We read with interest the article written by Hayward and Weersink entitled "Improving Medication-Related Outcomes in Chronic Liver Disease."[1] We believe the authors meticulously highlighted and described the intricate factors influencing medication management–related outcomes in patients suffering from chronic liver disease (CLD). However, we emphasize the importance of acknowledging what we consider a crucial and unmet need in this field: data regarding the pharmacokinetic and pharmacodynamic alterations of drugs at varying degrees of CLD.

In the context of cirrhosis, it has been reported that prescription drugs are often used precariously and prescribed by nonspecialist clinicians.[2] Unfortunately, these clinicians are faced with very few resources and data to help support evidence-based decision making. Some authors have attempted to bridge this gap by detailing altered pharmacokinetic and pharmacodynamic changes expected in patients with CLD and how drug adjustments might be attempted based on a specific pharmacokinetic profile.[3] These methods are useful but tedious and complex. On the other hand, drug monographs and tertiary references might offer recommendations on drug adjustment according to the severity of CLD. Yet, these recommendations are usually vague and merely state the obvious: "use [insert drug] carefully, owing to a lack of data."

Considering these observations, we would like to reveal the enterprise of clinicians who exhaustively summarized the literature regarding drug use in CLD. First, a multidisciplinary group based in the Netherlands developed an online resource[4] that covers various drugs and therapeutic drug classes. A Canadian multidisciplinary group created another[5] that offers drug-adjustment recommendations for various medications, with a thorough analysis of available data and references. These efforts offer readily available tools to support evidence-based decisions.

By acknowledging the glaring need to promote evidence-based decisions in drug dosing with CLD populations and by gaining insight into these initiatives, we believe it may open the dialog for concerted efforts by international panels of experts. Hence, these efforts may ensure that clinicians, who are most often nonspecialists in CLD, can easily access information regarding drug adjustment in liver cirrhosis. Initiatives such as the ones we presented are a steppingstone in improving the care and safety of CLD patients. We invite researchers to develop or promote similar initiatives and to put them to the test with implementation research methods.

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