

Letter to Editor

Hepatitis E Vaccination in Pakistan: Where Do We Stand

Jibran Umar Ayub Khan¹, Ayesha Qaiser², Azhar Zahir Shah³

¹⁻³Kabir Medical College Peshawar

Corresponding Author: Dr. Jibran Umar Ayub Khan. **E-mail:** jibranumar@yahoo.com

Hepatitis E is not something new when it comes to hepatology practice. We have been hearing it for years just like any other hepatitis but the troublesome dilemma is that we didn't have any vaccination for it until few years recently and the main treatment was conservative. It is obviously guided by monitoring of liver function tests. The magnitude of the problem is colossal and can trigger catastrophe. About 12 million people are the victims of Hepatitis B or C in our country and around 150,000 new cases are emerging annually. Hepatitis E has been affecting 3.3 million people all over the world. The numbers are huge in Pakistan where people do indulge in poor hygiene and the sanitation system is dismal serving as a root of all infective diseases and Hepatitis E is one of them.¹

The detrimental effects of hepatitis E in pregnancy has been a concern.¹ We are used to managing acute fatty liver, cholestasis of pregnancy and preeclampsia. All of these clinical conditions require sound clinical judgement to avoid drastic complications including early termination of pregnancy and resultant long term psychological implications in such patients.² While we have made major in rows in treatment viral hepatitis B and C including robust drug therapies and effective interferon free regimens leading to rapid clearance of the infection and ultimate cure, Hepatitis E management is still an area of concern.³ The introduction of hepatitis E vaccination few years ago in China has set the tone for guarding patients if not curing them immaculately.³

After the disastrous floods outbreaks in Pakistan, the need for vaccination is even more as there has been large influx of acute hepatitis patients and a large number of them have been found to be positive.⁴ It's a common fact that health crisis or any disaster forces us to think from a different perspective. Most of the time crisis doesn't create failures rather it exposes lacunae in underlying fragile health system and the same is in the case of hepatitis E knowing that it won't rise in clean living conditions. Rather the majority of the cases are from rural areas in our country with horrible living environment and poor health facilities.

In our country, the Hepatitis E virus (HEV) is quite common. It can be deadly during pregnancy, with soaring infection rates in both the mother and the child.⁵ The outcomes in pregnancy are devastating.⁶ At the moment we don't have concrete figures for numbers of vaccinations in our country and that is due to the fact that it has been launched very recently. According to figures by WHO 44000 deaths in 2015 occurred due to hepatitis E, an alarming figure and at the same time an eye opener for hepatologists throughout the world especially in Pakistan where the percentage may be even higher. Around 20 million HEV infections occur globally with 3.3 million having symptoms. Hecolin, the only vaccine against hepatitis E has been recommended by WHO along with other conservative treatment measures.⁷

According to one review the candidates have shown potential efficacy against this hepatitis but there is a need for mass vaccination and we need to come up

with large scale data to lay down the foundation for protecting the population especially pregnant women where the damage is the greatest.⁷ Prevention is better than cure. Education of population is essential prerequisite for convincing them. Hecolin should be seen as lightening at the end of tunnel. It is inevitable to have this vaccination and the sooner, the better.

References:

1. Castaneda D, Gonzalez AJ, Alomari M, Tandon K, Zervos XB. From hepatitis A to E: A critical review of viral hepatitis. *World J Gastroenterol*. 2021;27(16):1691715.
2. Bosan A, Qureshi H, Bile KM, Ahmad I, Hafiz R. A review of hepatitis viral infections in Pakistan. *J Pak Med Assoc*. 2010;60(12):104558.
3. Moin A, Fatima H, Qadir TF. Tackling hepatitis CPakistans road to success. *Lancet* [Internet]. 2018;391(10123):8345. Available from: [http://dx.doi.org/10.1016/S0140-6736\(18\)30462-8](http://dx.doi.org/10.1016/S0140-6736(18)30462-8)
4. Siddiqui T, Saadat A, Ameen AM. Devastating flood emergency in Pakistan- a recent threat to country's health care system. *Ann Med Surg* [Internet]. 2022;82(August):104633. Available from: <https://doi.org/10.1016/j.amsu.2022.104633>
5. Farooqi MA, Ahsan A, Yousuf S, Shakoor N, Muhammad H, Farooqi U. Seroprevalence of Hepatitis E Virus Antibodies (IgG) in the Community of Rawalpindi. 2022;10815.
6. Sultana R, Humayun S, Manzoor S, Humayun S. *Research Article*. 2022;49.
7. Ciglenecki I, Rumunu J, Wamala JF, Nkemenang P, Duncker J, Nesbitt R, et al. The first reactive vaccination campaign against hepatitis E. *Lancet Infect Dis* [Internet]. 2022;22(8):11101. Available from: [http://dx.doi.org/10.1016/S1473-3099\(22\)00421-2](http://dx.doi.org/10.1016/S1473-3099(22)00421-2)