

## **A Multifaceted Approach to Combat Viral Hepatitis and Liver Diseases: The Preventive Hepatology Initiative at a tertiary care center in India**

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**Background:** Viral hepatitis and liver diseases pose major public health challenges globally and in India. Control demands integrated prevention, early detection, and treatment strategies. Outcomes worsen with hepatic steatosis or alcohol as a "second hit," hastening cirrhosis and hepatocellular carcinoma. This abstract outlines a multifaceted preventive hepatology program at a tertiary care center and its role in combating these diseases.

**Analysis:** The program uses a multi-pronged approach: community screening camps for viral hepatitis, steatotic liver disease (SLD), and alcohol patterns in general and high-risk groups; family screening for liver patients (SLD, alcohol-related, hepatitis B and C); integration with national viral hepatitis and SLD programs for affordable care; micro-elimination in district prisons; and research like cohort studies and a cluster trial on public health interventions.

**Results:** Since December 2021, the preventive hepatology clinic has managed 1900 patients (340 HBV, 300 HCV, 260 ALD, 1000 SLD) at the tertiary center and screened 2720 via community camps (900 urban, 900 rural, 500 urban slum, 320 diabetics) plus 4050 prison inmates, achieving >90% linkage to care through national programs. Family screening of 4500 members from 1500 index patients showed high yield ( $p < 0.001$  vs. general screening), with SLD in 30-50% and >40% HBsAg/anti-HBc in HBV families (OR 5.2, 95% CI 4.1-6.6). Prison micro-elimination detected 138 anti-HCV+ (3.4%) via self-testing; of 117 HCV RNA+ (84.8%), 106 started treatment (90.6%), 74 completed (69.8%), and 71 achieved SVR (95.9%), yielding 51% cascade efficiency. Portable FibroScan and AUDIT enabled risk-stratified interventions for fatty liver and alcohol use. National integration optimized reach and efficiency.

**Conclusions:** This program advances India's battle against viral hepatitis and liver diseases via community outreach, family case-finding, research, micro-elimination, and national program synergy enhancing care access and reducing burden. It offers a scalable model for healthy liver initiatives.

**Disclosure of Interest Statement:** None to disclose