

Study to promote Standard Universal Protocol for implementing and improving chronic viral hepatitis eradication-A South Indian analysis.

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Background: Innovation acceleration against Hepatitis B and C infection awareness is an absolute need of the hour. The prevalence of HCV infection is climbing higher and higher probably due to more recognition or lack of vaccination. To the contrary, the number of patients infected with the chronic hepatitis B virus is declining due to the awareness among the public and vaccination availability but resistance is increasing. Viral hepatitis (VH) is a major public health problem, though combined efforts are internationally included in public health agendas. The difficulty in screening and identification of Hepatitis B and C presents a major burden in low and middle income countries (LMICs) including India. The diagnosis, prevention, treatment requires a regular international standard protocol to approach both the virus, this factor has to be implemented internationally for all the diagnosis and treatment criteria, which otherwise becomes very difficult for the infected persons living in lower socio economic countries and low income persons. We have been involved and working in screening and prevalence of asymptomatic chronic viral hepatitis since 1989. We like to suggest in a small way as the setbacks that we are facing in our environment in South India. Importance is given on the eradication of chronic viral hepatitis can be increased by the pharmaceutical industry, national governments and patient advocacy groups and NGOs to help the infected persons from lifelong treatment which could prevent cirrhosis and liver cancer among a majority of patients in India.

Aim

- Accelerate the screening and identification of chronic viral hepatitis to economically weaker population.
- An urgent need to standardize the protocols for universal treatment/diagnosis/research analysis and follow-ups of the patients to benefit all infected patients internationally.
- The identified positive patients should be accessed for their status of viral parameters at the earliest. The infected persons must be in a position to mention their problems to the centres for not involving in follow up.

Methods: Innovative approaches to the screening programme.

- Health Camps should be encouraged, by the Government organisation, NGO's through a proper research methodologies and qualified persons only. The grant should be allotted at all ends for reaching the public who has to be identified at the earlier stage.
- Each person should be given an ID Card which gives the follow up details and the treatment to be taken by the team of care taker, from any of a particular organisation with patients comfort zone. Treatment Improvement Protocols (TIPs) can be maintained.
- The patient ID should have standard protocol to be assessed between the organizations to avoid overlaps internationally. This is available in developed countries only. In countries

like India, we do have to implement this system to get over the chronic HBV and HCV infections.

- The cost for analysis to all the parameters and viral load should be made feasible by all patients in the low- and middle-income group and free for a particular lower economically weaker sector.
- Strong management, with trained technical people for guidance in follow up of positive patients and guidance for prevention for family members and close contacts of viral hepatitis needs attention.

Results: 1058 chronic viral hepatitis families have been identified, followed by screening between 2016 till date in Med Charitable Trust, a public organisation at Chennai Tamilnadu, South India. The scientific work was done at Sri Muthukumarn Medical College, Mangadu, Chikarapuram, Chennai. The 1058 chronic viral hepatitis families are from both urban and rural areas of south India. We are the first of its kind to serve chronic HBV and HCV infected patients in our locality with high rate of follow-ups. We could screen identify the serological parameters but finding difficult for viral load and to give free treatments due to lack of fund and guidance.

Discussion: Global community, with combined efforts to control viral hepatitis is an excellent method to get a positive effect with enthusiasm and recognition. Resistant development in CHB infection is a major obstacle. Due to the resistance problem there are not many options. There is a considerable risk of adverse effects with any agents. Unless there is an expanded and accelerated response it is estimated that the number of individuals living with HBV will continue to be at the same level for next 20 years. It is important to fulfil the following concepts. The need to make a standard protocol at every stage of diagnosis/treatment and follow-up visits. Initiating the general public and individual person realise the need for screening and investigating the presence of infection is a challenge and a fundamental need. The infected person are facing the burden as difficulties due to their socio economic status and high cost for treatment by the individual families. The lifelong treatment and high cost should be made free to involve infected population of low and middle income countries like India to protect, prevent them from cirrhosis and liver cancer like HCC. The uninfected high risk family members and health care workers can be prevented with safe and effective vaccination for free.

Conclusions: HBV and HCV pose a major health concern in our country, the precarious prevention of transmission and low access to diagnosis and treatment makes these viruses to be easily transmitted. Care to patients represents a challenge and we require to accelerate it with proper tie ups with the laboratory support, pharma companies. The agenda should include universal viral parameters and viral load assessments which will benefit the infected population for treatments, to prevent liver cirrhosis and HCC in the future. Day to day simple precaution. Standardization at all level, let not the diagnosis be guess work, let not the treatment be worse than the disease. We also recommend free vaccination and immunisation for all family members and close contacts of the infected members. Finally we appreciate to give an approach for new drugs that will increase the patients social lifespan in a feasible way for them to be included in the eradication programme that will in turn prevent future infection.

Futurology: Understanding the natural history, early detection, effective preventive measures together with statistical significance will lead to expected benefit exceeding the cost in effective preventive measures. A team should be formed by WHO and all the small organizations and NGO should be interlinked within a network, where the patient can be followed though an Identification Number from any organizations working on the single standard procedure in the eradication programme.