Conclusion
8. CONCLUSIONS

The role of hepatitis C virus in the various disease and healthy groups had been assessed and the present study leads to the following conclusions:

8.1. HBV and HEV are the leading aetiological agents in sporadic AVH. HCV is not implicated in sporadic AVH of the present series.

8.2. HBV is incriminated in a higher number of post-transfusion hepatitis than HCV. Significantly higher HCV positivity was observed in transfusion-associated AVH than sporadic AVH and hence transfusion was found to be a significant risk factor in the transmission of HCV.

8.3. HAV, HBV and HEV are the major causes of fulminant hepatic failure. Significantly higher mortality is seen in HEV positive pregnant women. In SAHF, HBV is again the leading agent. HCV is not implicated in the cause of FHF and SAHF.

8.4. Among CLDs, HBV emerges as the major causative agent. HCV is the leading cause of non-B CLD in the present study.

8.5. The leading viral agent in Hepatocellular carcinoma is still HBV, followed by HCV.
8.6. The study shows that HBV patients are younger than the HCV ones, inferring that HBV infection would have been acquired earlier in life than HCV.

8.7. High positivity of HBV and HCV is seen in chronic renal failure cases undergoing haemodialysis and/or transfusion/transplantation. The study suggests that HCV transmission can occur at a higher rate with increase in transfusion units or haemodialysis.

8.8. The finding that infections in intravenous drug abuse is not just the problem of the West but also that of India with a higher HCV positivity than HBV was another observation made in the study.

8.9. Health care workers had a higher HBV and HCV positivity than the blood donors in the present study indicating the higher risk involved in health care employment and absolute need for vaccination against hepatitis B.

8.10. The HBV and HCV seroprevalence in voluntary blood donors was 3.7% and 0.86% respectively. The present study suggests that HBV- HCV seroprevalence in Southern India is in the intermediate range (2-7% for HBV and 0.5-2.0%)1.0%).
8.11. Evaluation of diagnostic systems for HBV and HCV has shown that (i) Lisadex and Uniform II emerged as the most sensitive and specific HBsAg ELISA kit of the 10 commercial kits evaluated, (ii) II generation ELISA kits are not suitable for anti-HCV screening, (iii) III generation ELISA and/or RIBA 3.0 could be the best assay adopted for routine anti-HCV screening, and (iv) PCR proved as a very useful molecular tool in the diagnosis of ELISA seronegative HBV/HCV cases.

8.12. The RIBA seroreactive pattern on analysis indicated the possibility of the replicative phase or the genotype of HCV.

8.13. The study proved that the RIBA indeterminate HCV cases, especially c33 and c22, have to be viewed as indicating HCV infection and should be confirmed by HCV-RNA PCR.

8.14. HCV-HIV co-infection may suppress the expression of HCV seroreactive antibodies though not HCV-RNA is another conclusion drawn from the study.

8.15. The study confirms that both ALT and anti-HBc IgM should not be used as surrogate markers of HCV infection.
8.16. The autoantibody positivity was significantly high in the HCV positive CLD group than the HBV positive and NBNC cases. Higher autoantibody positivity, in the CPH and CAH stages of liver diseases with HCV positivity and in the cirrhosis stage of NBNC cases, were observed.

8.17. The prospective follow-up study revealed that while only 11.1% of AVH-B cases (n=9) had persistent HBsAg antigenaemia progressing to chronicity, all 7 AVH-C cases had persistent HCV markers indicating the higher risk of developing CLD due to HCV. Mortality rates of HBV and HCV are similar and need equal attention.