

## Prevalence of Hepatitis C in Donor Screening at CWM Hospital, Suva, Fiji (January 2018 – March 2025)

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**Background:** Hepatitis C Virus (HCV) is a global public health concern that remains understudied in Fiji. With no vaccine available, blood donor screening serves as an important tool to not only prevent transmission but also to provide insight into the prevalence of the larger population. This research aimed to determine the prevalence of HCV amongst blood donors at the Colonial War Memorial (CWM) Hospital from January 2018 to March 2025. Demographic trends were analysed by age, gender, race and location. As this study period included the COVID-19 pandemic, trends during this time were also assessed.

**Methods:** A retrospective descriptive study was conducted whereby worksheets, reports and screening forms from the Serology department and Blood Donor Services at CWM Hospital were utilized. The study population included those aged 18-60 years, encompassing anti-HCV positive, repeat and first-time donors. Data was extracted from records and transferred into a Microsoft Excel spreadsheet and coded to maintain confidentiality. Prevalence and trends throughout the research period were then analysed.

**Results:** A total of 55,958 blood donations were processed for serological donor screening during the study period. Of these, 549 donations tested positive for anti-HCV antibodies, giving an overall prevalence of 0.98%, with a rising trend over time, including the pandemic. Males, iTaukeis, donors aged 23-27 years and those residing in Suva and Nasinu comprised majority of the positive cases. Issues with record keeping and changes in testing protocol were also identified.

**Conclusion:** The findings show a consistent increase in anti-HCV prevalence among blood donors in CWM Hospital from January 2018 to March 2025. Addressing gaps such as incomplete record keeping, lack of inter-departmental collaboration and inconsistent testing protocols is needed to improve screening accuracy. Through this, policy development can be better informed and public health outcomes can improve.

### Disclosure of Interest Statement:

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