Treatment of Chronic Hepatitis C in Resource-limited Situation
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Background / Aims
In the treatment of chronic HCV infection using DAAs, it is usually tested the following parameters; HCV Genotype, Fibrosis assessment and Measurement of Viral Load at the designated time points, on treatment monitoring of viral kinetics. However, in resource limited situations where the above mentioned parameters cannot be performed, and to get the best results special unique treatment regimen should be adopted.
Myanmar GI & Liver Society Clinical Practice Guidelines (2017) recommend the following regimen for those who cannot afford genotype testing or Fibroscan and on treatment monitoring viral load testing; fixed-dose combination of sofosbuvir and velpatasvir with ribavirin (SOF/VEL/RBV) for 12 weeks.
This study is aimed to assess the efficacy of this unique treatment regimen in Myanmar population.

Methods
A prospective and observational study of 275 treatment-naïve patients infected with chronic hepatitis C was performed. The patients were treated with SOF/VEL/RBV for 12 weeks. Patients were evaluated clinically along with laboratory testing, at entry and every 4 weeks during treatment and 12 weeks after the end of treatment to assess safety of treatment. Assessments during treatment included standard laboratory testing, serum HCV RNA, vital signs, electrocardiography, and symptom-directed physical examinations. All adverse events were recorded and graded according to a standardized scale.
Results
Total of 275 patients were screened for this study and received the fixed-dose combination of sofosbuvir and velpatasvir with ribavirin (SOF/VEL/RBV) for 12 weeks at Yangon GI and Liver Centre, between March 2017 and September 2018. The patients were well-tolerated to drugs and no one discontinued the treatment through the study. The mean age at the time of treatment initiation was 51.2 years and 49% of patients were male (n=135) and 51% were female (n=140). About 46% (n=127) of patients had cirrhosis in ultrasound scan at the time of treatment initiation. The median BMI (Body Mass Index) of the entire group was 25.6 kg/m². Overall Sustained Virological Response (SVR) rate was 99.3% of patients (273/275) with 2 relapsers. There were no incidents of serious adverse events and no discontinuation of treatment due to adverse events during the course of this study. Among the entire group, the dose of ribavirin had to be reduced in 32 patients (11.6%) and only one patient needed the erythropoietin-stimulating agent for the correction of anaemia but no blood transfusions were necessary.

Conclusion
According to Real world generic Direct Acting Anti-viral (DAAs) experiences in Myanmar, DAAs are very cheap, free from adverse effects and efficacy is excellent and achieving SVR rates above 90% in all the cases. In resource-limited situations like Myanmar, the following clinical practice guidelines for the treatment of CHC is proposed; Pangenotypic SOF/VEL can be combined with Ribavirin in cases without testing for genotype and assessment of fibrosis score and testing viral load in pre-treatment and post-treatment 12 weeks. In those cases treated with SOF/VEL/RBV for 12 weeks achieved nearly 100% SVR rates. Myanmar patients can tolerate RBV very well and there is no stoppage of the treatment due to RBV side-effects. It is highly recommended to practice such special treatment regimen in resource limited countries like Myanmar that will significantly increase the access to the DAA therapy in the general population.