Hepatitis C treatment in a primary care clinic in the high HCV burden setting in Karachi, Pakistan

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1. Background

- The burden of hepatitis C infection (HCV) in Pakistan is among the highest in the world with national HCV prevalence reported to be 4,9%
- In 2016, access to DAA has improved in Pakistan, in particular with the availability of Daclatasvir
- This pangenotype treatment option allows simplification of testing treatment and care
- We describe data from the chronic hepatitis C (CHC) programme in the community clinic in Machar Colony, Karachi, Pakistan

2. Methods

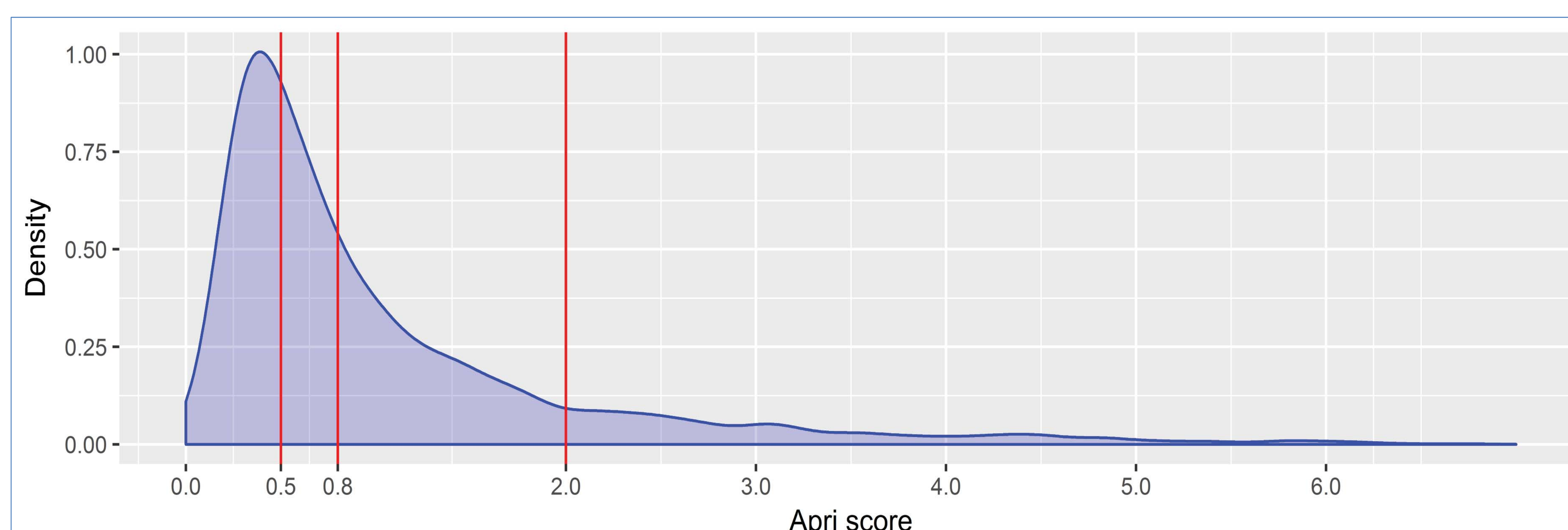
- Patients were screened for HCV according to WHO 2014 guidelines.
- CHC was confirmed by presence of HCV RNA
- APRI score was used to prioritize initiation of treatment (> 0.5)
- Eligible patients were treated with 12 or 24 weeks of Sofosbuvir and weight-based Ribavirin until Daclatasvir based regimen were introduced in October 2016.
- Patients were tested for genotype until pangenotype treatment was introduced
- HCV viral load (VL) was measured at baseline and 12 weeks after treatment completion.
- Treatment was initiated and followed up by general practitioners in the primary care clinic.
- Data was collected under routine programme conditions and was entered in Hepa-MuDud (Hepatitis Multicentric Database, Epicentre, Paris).
- Systematic collection of risk factors was implemented in April 2016, using MSF-Epicentre standardized case report forms
- Patients not seen for 60 days after last date of next appointment were defined as lost to follow-up (LFU)
- Data presented covered the period January 2015 to April 2017

3. Results

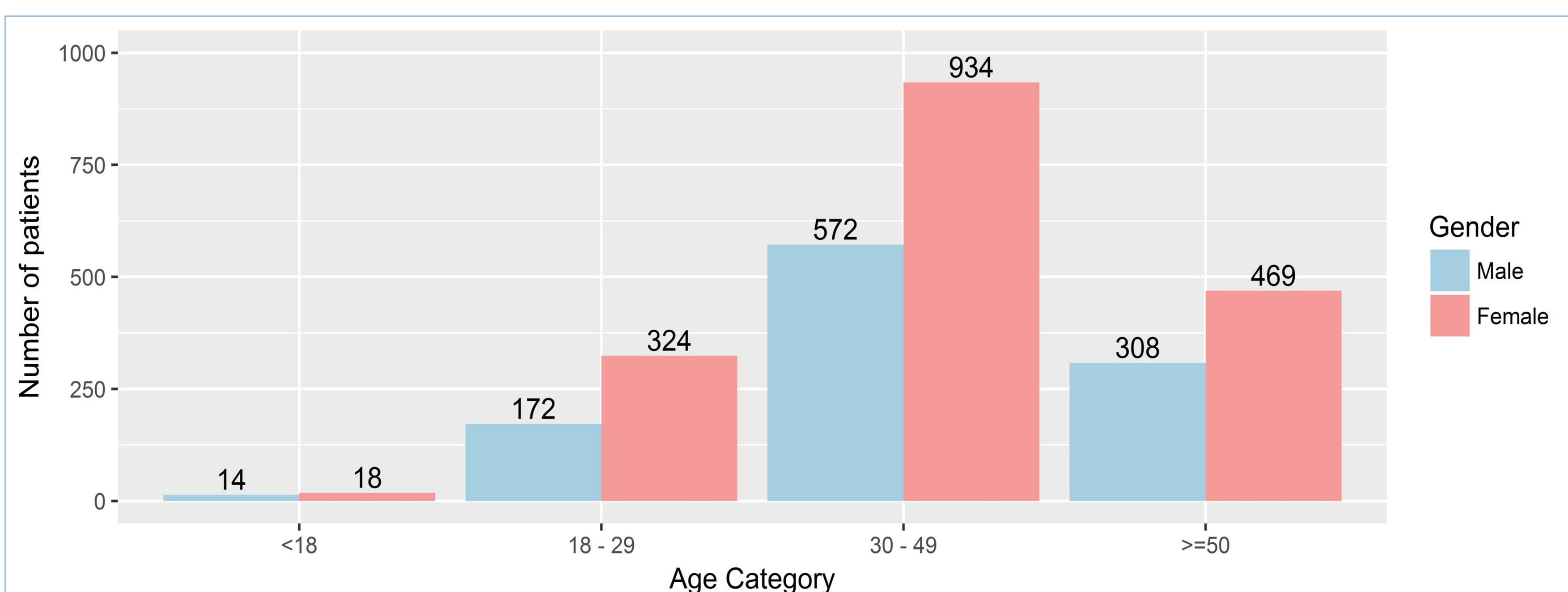
Study population – characteristics at enrolment

Characteristics at enrolment	Statistic	Characteristics at enrolment	Statistic
Number of patients enrolled	2811	HbsAg positive n (%)	31 (1,1)
Age (years), median (IQR)	40.0 [31.0-50.0]	HIV co-infected n (%)	8 (0,3)
Female, n (%)	1745 (62.1)	Genotype n(%)	
Apri score n (%)		1	63 (9.8)
> 2	359 (14.3)	2	20 (3.1)
0.6 – 2	1257 (50.1)	3	561 (86.8)
0 – 0.5	891 (35.5)	4	2 (0.3)

Distribution of APRI score at enrolment - Thresholds at 0.5, 0.8 and 2



Distribution of patients enrolled per sex and per age category



Risk factors at enrolment

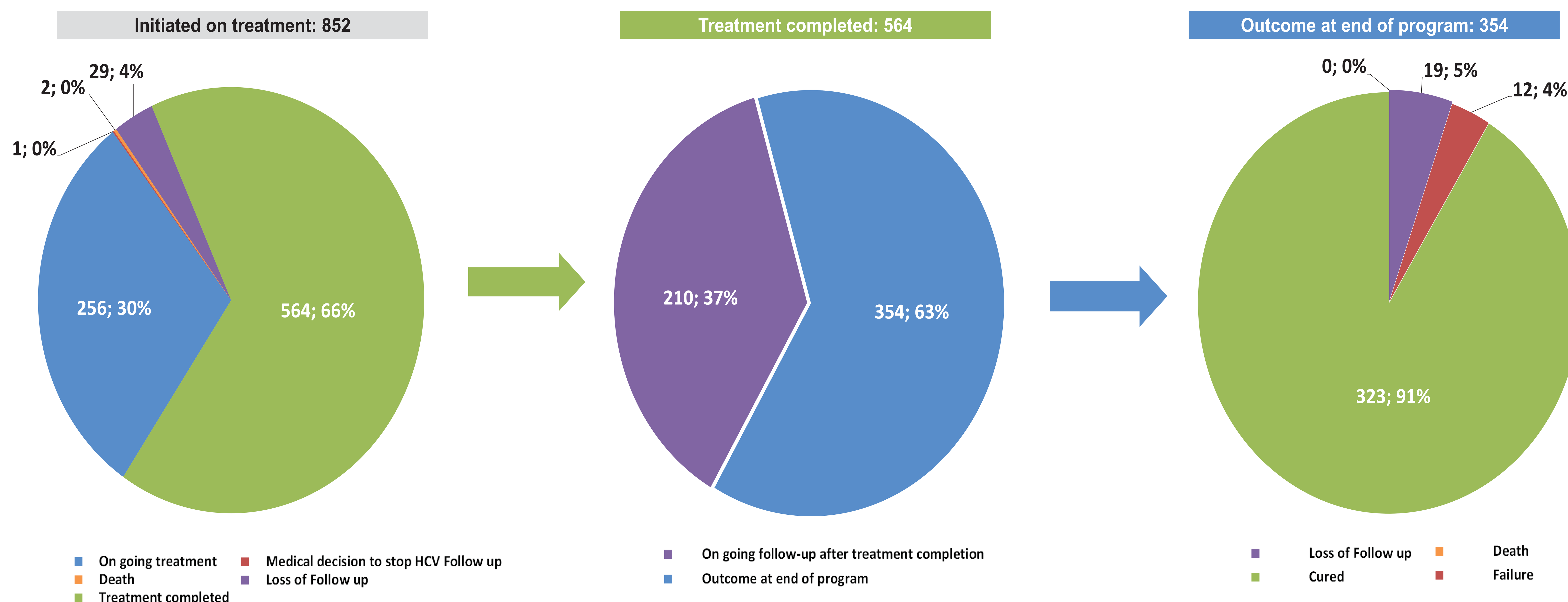
Risk factors	n/N* (%)
History of injections at unregistered clinics	444/1210 (36,7)
History of Invasive medical procedures	227/1209 (18,8)
History of blood transfusion	1042/1217 (85,6)
Health care worker	17/1208 (1,4)
Prisoner (past)	40/1418 (2,8)
Partner with HCV positive status (current)	126/705 (17,9)
Partner with HCV positive status (past)	58/705 (8,2)

* Number of patients that responded to the question

- Genotype 3 was the most prominent (86.7% of the test done), followed by genotype 1 and 2
- 64.4 % of the patients had APRI score greater than 0.5 meeting the criteria to start treatment
- Females represented almost two thirds of patients
- History of blood transfusion (85.6%) and history of injections at unregistered clinics were the most common risk factors (36.7%). Around 25% of the patients had partner with HCV positive status (current and past)
- 849 patients initiated treatment, 378 on Sofosburir / Daclatasvir, 446 on Sofosburir / Ribavirin, 24 on Sofosburir / Ribavirin / Peg-Interferon and 1 on Sofosburir / Daclatasvir / Ribavirin

- 91% (323 out of 354) of the patients that were exited of program were cured
- 12 patients failed, all on Sofosbuvir / Ribavirin. 2 patients were retreated with Sofosburir / Daclatasvir / Ribavirin and 1 on Ribavirin and Sofosburir / Ledipasvir / Ribavirin
- 2 patients died before completion of treatment , 1 from hepatocarcinoma (possibly related to treatment) and 1 from cerebro vascular accident (not related to treatment).
- 29 patients were LFU before end of treatment and 19 were LFU after end of treatment giving an overall LFU rate of 5.6% for patients ever initiated on treatment

Cascade analysis for patients that were initiated on treatment (all regimen, patients that were re-treated were counted twice)



4. Conclusion

- Interim results suggest feasibility of the CHC treatment delivery at the primary care within the affected community, using simplified diagnostic and treatment algorithms.
- LFU level will have to be investigated in order to maintain a high cured rate in the program.

5. Acknowledgment

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