

Treatment Adherence Among People Who Inject Drugs Taking Directly Observed Direct Acting Antiviral Therapy at Kirketon Road Centre

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Introduction

The Kirketon Road Centre (KRC) is a primary health care service in Kings Cross, Sydney, providing prevention, treatment and care of viral hepatitis for people who inject drugs (PWID). KRC developed an individualised adherence support program for direct-acting antiviral (DAA) therapy, with those assessed as requiring maximum support receiving daily directly observed treatment (DOT). With daily DOT, missed doses led to extended treatment until the planned total doses were administered.

The aim of this study is to report adherence of clients undergoing daily DOT and the proportion who extended duration of treatment.

Methods

Daily dosing of DAAs was recorded on medical prescription charts. Data were analysed to determine the number of missed doses, extended duration of treatment, and median adherence with and without extension.

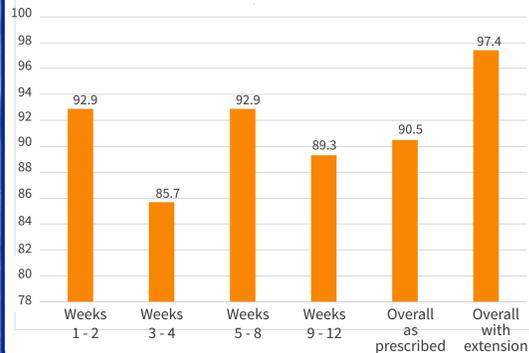
Demographics



Results

Forty-five of 155 (29%) clients initiated on DAA therapy from March 2016 elected to receive DAAs as daily DOT. Of these, 27 received daily DAAs at KRC and are included in the analysis; the remaining 18 clients received daily DAAs arranged through other services. Twenty (74%) clients required extension of treatment (median 5 days, range 2-41), including 4 clients who extended by at least two weeks. Among those who are 12 weeks post-treatment with HCV RNA assessment (n=15), all are undetectable.

Median Percentage of Doses Taken



Missed doses and gaps in taking daily DAAs

	Median (range)
Weeks with missed doses	4 (0 - 12)
Duration = 8 weeks	3.5 (2 - 8)
Duration = 12 weeks	4 (0 - 12)
Number of gaps	4 (0 - 12)
Gap size	1 (1 - 7)
Maximum gap size	2 (0 - 7)
Client average gap size	1.25 (0 - 3)

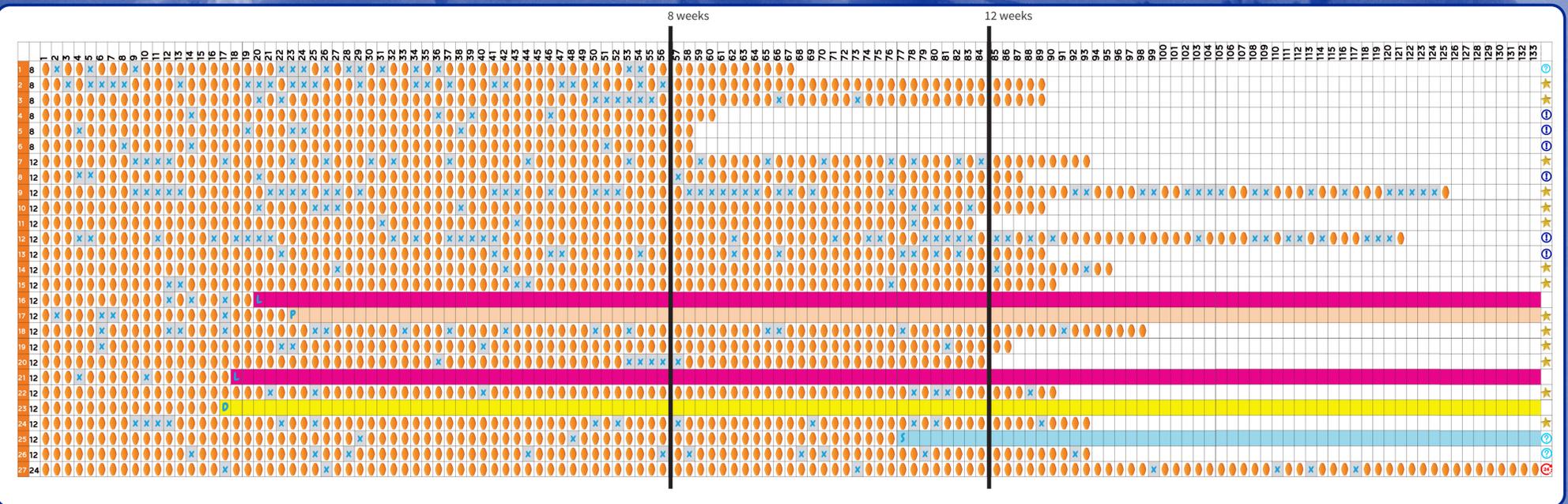


Figure Key:

- Orange dot = Dose taken
- Blue 'x' = Dose missed
- Pink bar = Did not return
- P in box = Client continued treatment in prison, DAAs provided to gaol
- D in box = Client deceased
- S in box = Client switched to weekly dosing
- Ⓢ = Client prescribed 24 weeks treatment; continued and extended treatment by 10 days with 4 missed doses in remaining time period (not shown); virus not detected at SVR12
- ★ = Virus not detected at SVR12
- ! = SVR12 not taken
- ? = SVR12 not due

Discussion

This study demonstrates daily dosing can achieve high medication adherence for socially marginalised clients within this individualised model of care. Further, extension of treatment to adjust for missed doses appears feasible and may be considered in those with treatment gaps.

Despite missing doses in one-third of weeks and with treatment gaps of several days, all clients tested thus far have still achieved virological cure.

Acknowledgements

This study was funded in part by a Fellowship Research Grant from Gilead Sciences Pty Ltd.

Gilead Sciences had no role in the design, analysis, interpretation or presentation of the study.

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