

ABSTRACT

BACKGROUND

Direct Observed Therapy (DOT) has been proven tool for increase adherence with medication in conditions such as Tuberculosis (TB), psychiatric conditions and HIV. TB and HIV share the development of drug resistance with and without adherence, but more when patient has poor medication compliance, however, TB can be cure but HIV is a chronic, long-life condition.

ARGUS community (ARGUS DOT) is a program designed to help with DOT in HIV patients with compliance problems, who have consented for their inclusion in the program. This program works with patient referred from providers affiliated with St. Barnabas Hospital (SBH Health System) – Designated AIDS Center (DAC) and calls them through phone Monday to Friday to remind them to take their medication. With ARGUS DOT we aimed to increase virally suppressed patients and help decreasing HIV transmission as well as improving overall health of enrolled patients.

OBJECTIVE

Analyze if ARGUS DOT was effective tool to help reach SBH goal of control HIV viral load in 90% of the patients.

METHODS

SBH DAC started referring patients who have not been virally suppressed despite all available in- house efforts to Argus DOT during March 2021 and those who agreed to DOT were enrolled in Argus-DOT program.

We performed a retrospective chart review of SBH-DAC Argus DOT patients to see if this intervention improved their HIV viral load from March 2021 to December 2021, and if there were any barriers for our patients regarding receiving these benefits.

RESULTS

18 patients approached, 15 agreed with the program. 6 patients dropped out of the program before achieving suppressed HIV viral load. 8/9 patients who continued in ARGUS DOT program achieved suppressed HIV VL (89%). Patients who declined or dropped out of the program did not achieve HIV VL suppression.

CONCLUSIONS

This study, although small, shows Argus DOT is an asset in achieving decrease viral load in a subset of SBH HIV patients with medication adherence barriers. 50% accepting and staying with the program achieved 89% viral suppression; close to the 90% the goal of “End of Epidemic NY blueprint”. 9 out of 18 who did not agree or discontinued Argus DOT due to uncontrolled psychiatric, substance use, non-working phones and distrust did not achieve viral suppression. Uncontrolled psychiatric conditions, substance abuse and trust in DOT program are important barriers to assess so the program can be successful.

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RESULTS 1

- 18 patients were approached by DAC team from March 2021 to December 2021 to be enrolled in Argus DOT; of those, 15 patients originally agreed to the program. 3 patients that declined; reasons found included:
 - 1 went to nursing home due to chronic comorbid diseases
 - 1 refused due to uncontrolled polysubstance use
 - 1 felt more comfortable with home health attendant
- Of the 15 patients who originally agreed to the program, 6 patients discontinued the program; reasons found included:
 - 1 uncontrolled bipolar disease
 - 1 uncontrolled depression and polysubstance use;
 - 2 uncontrolled substance use
 - 1 felt health home and physician was enough with variable improvement in viral load
 - 1 felt physician, medication blister pack and home health was enough with improved viral load
- Another barrier mentioned was lack of a working phone. None of these patients achieved suppression of HIV viral load.

RESULTS 2

9 patients stayed with Argus DOT: 8 out of 9 patients (89%) achieved a viral load < 200 copies/ml and one achieved 230 copies/ml from 2200 copies/ml. 2 patients achieve a viral load < 20 copies/mL, below the level of detection by the test.

Figure 1 and 2 shows the graph with HIV viral load trend of the 9 patients who stayed in the program.

FIGURE 1

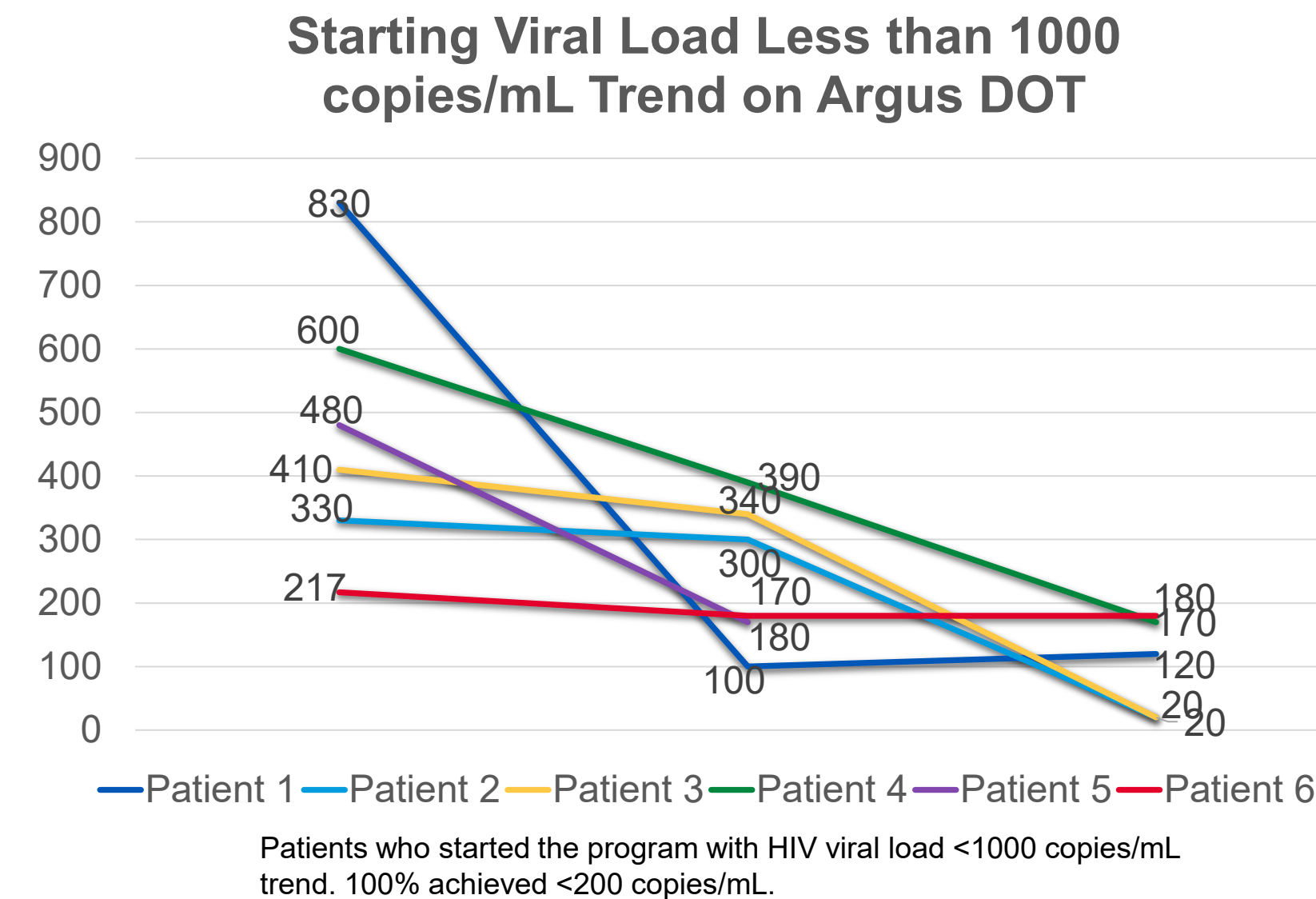
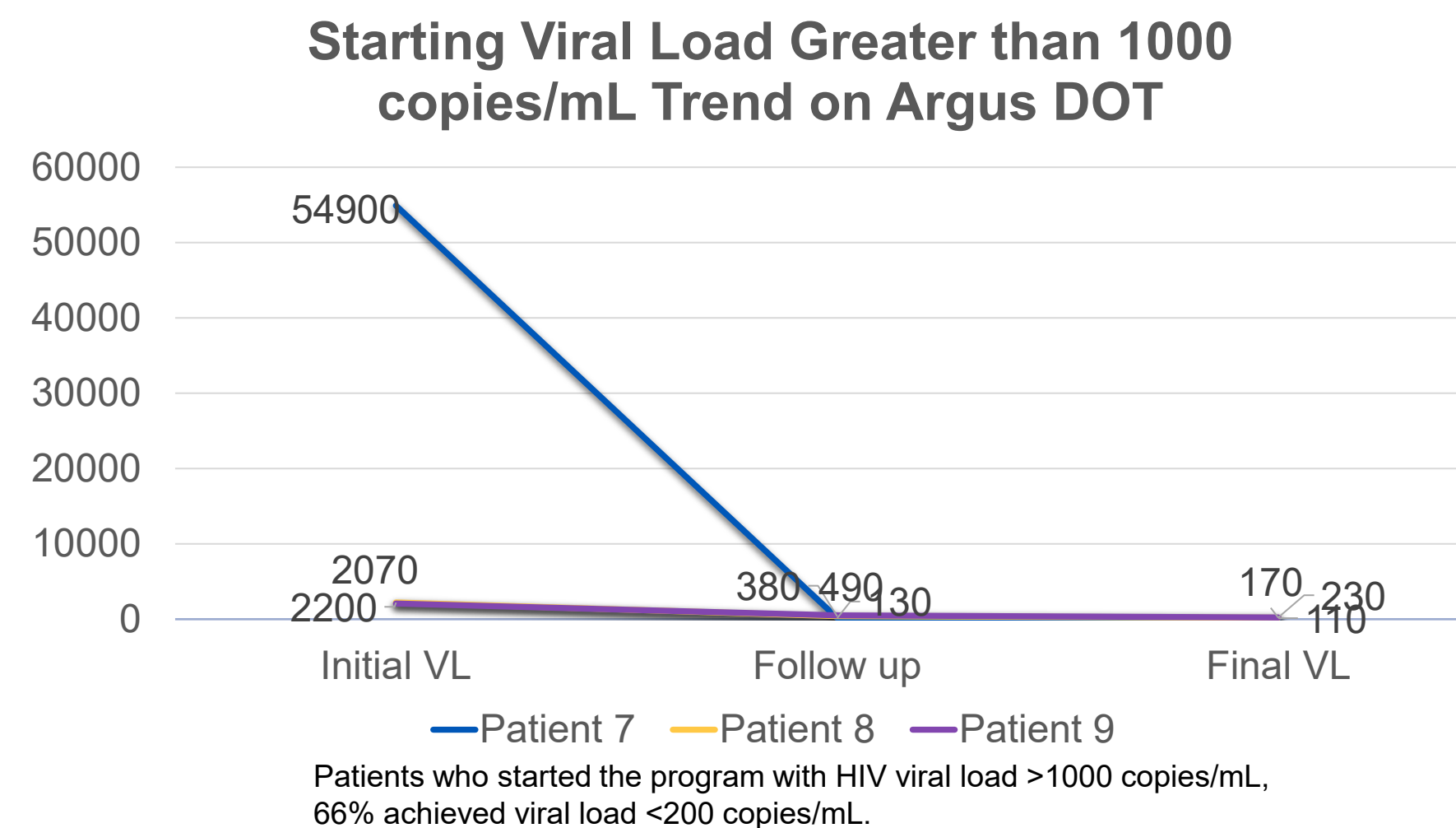


FIGURE 2



DISCUSSION

- Enrolling patients in Argus DOT was effective to help achieve viral suppression in HIV patients with uncontrolled viral load.
- Successfully diagnose and treat psychiatric conditions and substance use is determinant in a HIV patient to achieve viral suppression and enroll/continue in DOT program.
- Medication adherence is one of the top reasons why patients in HIV viral suppression medication lacks to suppress viral load.

CONCLUSIONS

- This study, although small, shows Argus DOT is an asset in achieving decrease viral load in a subset of SBH HIV patients with medication adherence barriers. 50% accepting and staying with the program achieved 89% viral suppression; close to the 90% the goal of “End of Epidemic NY blueprint”. 9 out of 18 who did not agree or discontinued Argus DOT due to uncontrolled psychiatric, substance use, non-working phones and distrust did not achieve viral suppression. Uncontrolled psychiatric conditions, substance abuse and trust in DOT program are important barriers to assess so the program can be successful.

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