COLUMBIA | VAGELOS COLLEGE OF PHYSICIANS & SURGEONS
PROGRAM FOR EDUCATION IN GLOBAL AND POPULATION HEALTH

Evaluating Clinician Responses to Treatment Failure in Patients Living with HIV in La Romana, Dominican Republic

Nadia Goldberg[a] and Erik Bratland[b]
[a] Columbia Vagelos College of Physicians & Surgeons, [b] University of Massachusetts Chan Medical School

Research Questions: How accurately are clinicians following the national protocol in cases of treatment failure in patients living with HIV? How confident do clinicians feel in their ability to treat patients who are in treatment failure?

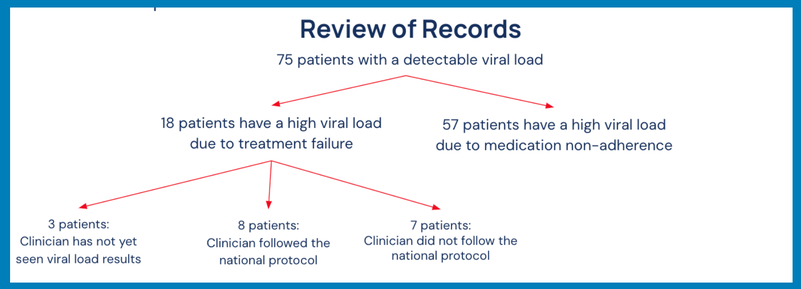
BACKGROUND

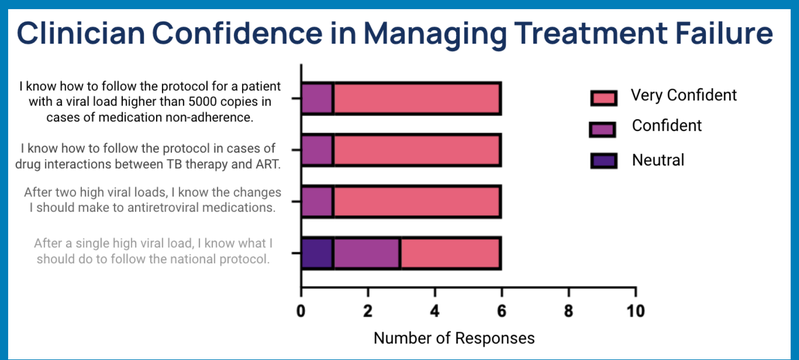
Clinicians at Clínica de Familia in La Romana (CFLR) treat 2,500 patients living with HIV. Some patients who are on antiretroviral therapy (ART) but continue to have a detectable viral load are in treatment failure. Treatment failure is defined as the inability to achieve an undetectable viral load after 6 months on ART[1]. In the DR, virologic suppression rates are lower than global averages[2]. On an annual basis it is important for CFLR to review the responses of clinicians to treatment failure in HIV positive patients to ensure that they are following the national protocol[3]. This review had not been conducted in three years.

CLÍNICA DE FAMILIA LA ROMANA

CFLR is a non-profit clinic founded in 1998 to reduce the high rates of vertical transmission of HIV in the area. Since then, the clinic has grown substantially and offers comprehensive HIV care to adult and pediatric populations. The clinic also offers general services in pediatrics, family medicine, family planning, gynecology, cardiology, nephrology, nutrition, and mental health care. Patients living with HIV receive free services, and other populations receive care at a significantly discounted rate. CFLR's Health Promoters work in the community to provide primary health care and sexual health education and counseling, and Navigators provide support to people who have been newly diagnosed with HIV or have been lost to follow-up. CFLR currently has 117 staff members; 94% of staff members are Dominican and 5% are Haitian.

TABLES





Examples: Failure to Follow Protocol

In three cases, the patient appeared adherent to medication and the viral load increased, but the clinician did not order a second viral load analysis within two to three months.
After two high viral loads, the clinician did not change the medication. It took eight months to change the medication.
Due to treatment failure, the clinician prescribed a new medication but failed to change medication classes. This can lead to cross resistance.
A patient was taking TB medication, and during this time their viral load increased - it appears that the clinician did not increase the dose of the antiretroviral medication.
A patient had a very high viral load after being undetectable for many years. This is a suspicious viral load result - it is possible that the result was erroneously from another patient.

METHODS

Using the patient database, 75 patients who had a viral load of 5000 copies or above and who started ART prior to January of 2022 were randomly selected. Patients who were non-adherent to medication, which was based on number of missed appointments and number of missed doses, were not included. For patients in treatment failure, a chart review was conducted to determine if treatment failure was diagnosed and treated properly according to the national protocol.

For clinician interviews, six general medicine and family medicine clinicians were administered a five-question survey. Four questions involved a Likert scale, and the fifth question was short-answer format and asked: "What do you believe is the biggest barrier to implementing the protocol?"

Of 18 cases of treatment failure, 7 cases involved errors in following the national protocol. Challenges included timely viral load analyses, TB and HIV drug interactions, and medication cross resistance. According to clinicians, barriers in following the protocol include slow lab processing times, inadequate access to ART, and lack of trust between patient and physician.

DISCUSSION

These results suggest that CFLR clinicians may benefit from continuing education regarding the national protocol, particularly about TB and HIV drug interactions and HIV medication cross reactivity. This research also suggests that internal and external processes surrounding lab results should be reviewed for efficiency and adequacy: delayed results or incorrect results often inhibited clinicians from following the protocol.

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Contact Information: nag2170@cumc.columbia.edu, erik.bratand@umassmed.edu
Funding: Harold Varmus, M.D. P&S '66 Global Scholars Fund
Mentors: Adriana Tiburcio M.D., Medical Director CFLR; Michael Yin M.D. M.S., Columbia University