

# *Impact of the Minority AIDS Initiative on Participants in Treatment Education and Adherence Programs*

## **Summary**

*Information from participants in Treatment Education and Adherence programs indicate that:*

- *Sixty percent reported improved adherence to treatment; 54% improved CD4 counts; and 68% improved viral loads*
- *Participants who adhered to their prescribed treatment improved more than those who did not*
- *Participants who improved their adherence improved more than those who did not*
- *Participants who were initially in the poorest health improved the most*
- *Participants who stayed in their programs continued to benefit*

In 1998, in response to a Congressional Black Caucus (CBC) Initiative, Congress allocated new funding under the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act for eligible metropolitan areas where minorities are disproportionately affected by the HIV/AIDS epidemic. Minority AIDS Initiative funds are designed to reduce HIV related health disparities and improve the health outcomes for HIV infected minorities. Directed toward minority community based organizations, these funds were established to expand medical and supportive services in areas where such services may not be readily available.

In New York City, 12 community-based agencies have received funding to provide Treatment Education

and Adherence programs to minority populations. These programs provide:

- ❑ Treatment education and intake assessments
- ❑ Treatment education workshops
- ❑ Counseling, and
- ❑ Follow-up encounters.

These agencies have served 2,258 clients since they first began.

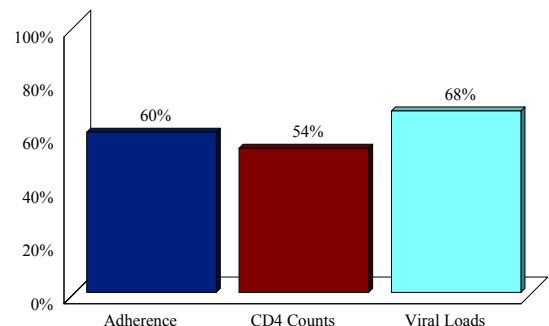
As part of their intake assessments, each agency collects information on adherence to treatment<sup>1</sup>, CD4 counts, and viral loads. This information is gathered again at follow-up encounters. Comparing information from intake to follow-up provides a measure of the benefits of these programs.

## *How Much Do Participants Benefit?*

Follow-up data are available for 276 participants who indicated at intake that they were either not taking medications or failing to take their medications as prescribed. At follow-up, 60% of these participants were adhering to their prescribed treatments, meaning they reported they had not missed taking any medications.

CD4 counts at intake and follow-up were available for 816 participants. Clients were classified as improved if their CD4 counts were higher at follow-up. By this measure, the health of over half of the

**Improvements in Adherence, CD4 Counts, and Viral Loads**



<sup>1</sup> Adherence to treatment is operationalized as not missing any medications.

clients (54%) had improved since they began participating in one of the programs.

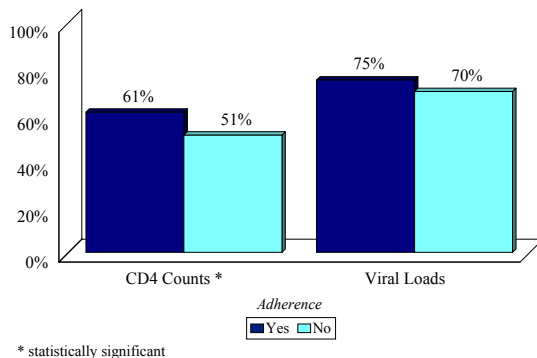
Viral loads at intake and follow-up were available for 739 participants. Clients were classified as improved if their viral loads were lower at follow-

up by a log unit change of .3 or more<sup>2</sup>, if their viral loads had moved from detectable to undetectable, or if their viral loads were undetectable at both times. By this measure, the health of over two-thirds (68%) of the participants had improved since they entered one of the programs.

## Which Participants Benefit Most?

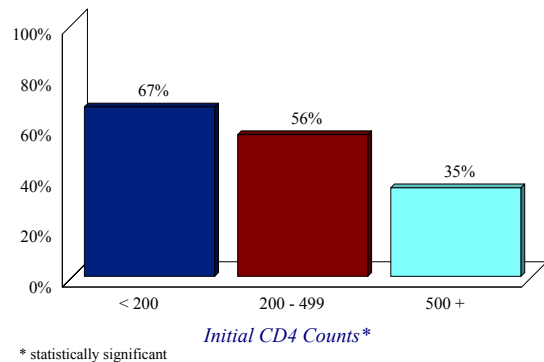
In order to determine if the Minority AIDS Initiative programs are more effective with some subgroups, improvements in CD4 counts and viral loads were analyzed within subgroups. There were no significant differences by ethnicity or gender. This means that the programs were equally effective with men and women, and African-Americans, Latinos, and other ethnic groups experienced the same benefits. However, there were other subgroup differences.

**Improvements in CD4 Counts and Viral Loads by Adherence to Treatment**



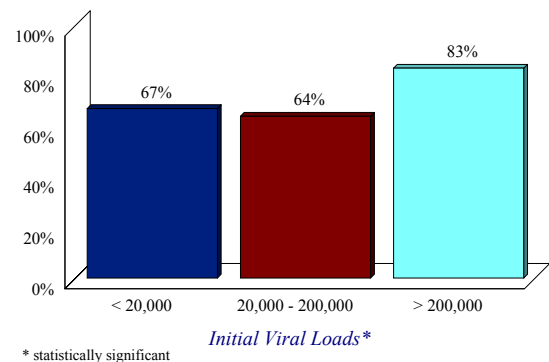
*Participants who adhered to their treatment improved more than those who did not.* Among participants who adhered to their prescribed treatment, 61% reported improved CD4 counts and 75% reported lower viral loads. This compares to 51% with higher CD4 counts and 70% with lower viral loads among those who missed medications. These findings support the underlying thesis of these programs that better adherence leads to better health.

**Improvements in CD4 Counts by Initial Level**



*Participants with initially lower CD4 counts improved more than those with higher counts.* Normal CD4 counts in adults range from 500 to 1,200 cells per cubic millimeter. Only 35% of the participants who entered the programs with CD4 counts that high showed improvements, compared to 67% of those with CD4 counts below 200. Those individuals who have the poorest CD4 counts benefit most from these programs.

**Improvements in Viral Loads by Initial Level**

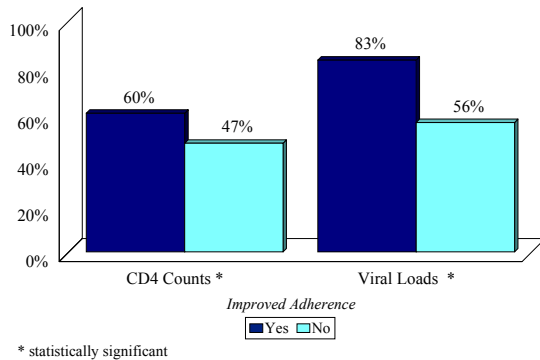


<sup>2</sup> Repeated viral tests can give results that vary by a factor of three. This means that a meaningful improvement would be a drop of more than one-third, or at least a .3 log unit change. The tests are unable to detect viral loads below 50.

*Participants with initially higher viral loads improved more than those with lower loads.* Two-thirds of those whose initial viral loads were below 200,000 had improved viral loads at follow-up. But those with initial viral loads above 200,000 did even better. Five out of six improved. The patterns of improved viral loads and CD4 counts indicates that those who benefit most from these programs are those who were initially in the poorest health.

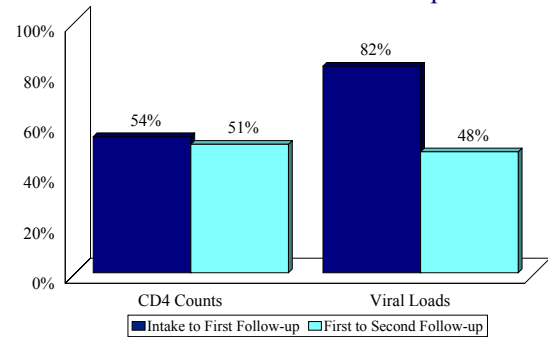
*Participants who had prescribed medications at the time they entered the programs improved more than those who did not.* Three-quarters of the clients already had prescribed medications when they entered their programs. This group was more likely to report improved CD4 counts and viral loads than people who entered the programs without prescribed medications. CD4 counts did not differ between the two groups at intake although viral loads were higher among those without prescribed medications.

### Improvements in CD4 Counts and Viral Loads by Improved Adherence to Treatment



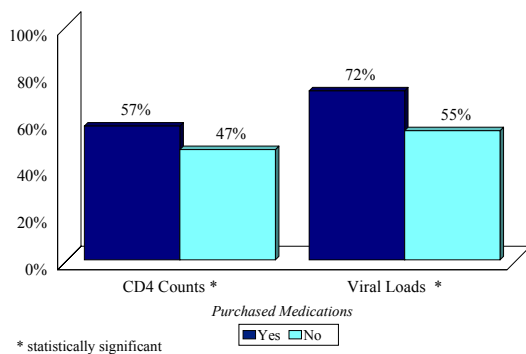
*Participants who improved adherence to their prescribed treatment improved more than those who did not.* As reported earlier, 60% who reported missing medications at intake or reported not having prescribed medications were adhering at follow-up. 60% of these reported higher CD4 counts and 83% reported lower viral loads. Both of these were significantly better than among those who continued to miss medications. Thus, if the programs are able to increase adherence to treatment, the health of participants will improve.

### Improvements in CD4 Counts and Viral Loads between Intake & First Follow-up and between First & Second Follow-up



*Participants who stayed in their programs continued to benefit.* Data are collected from programs at six-month intervals. 209 clients were in their programs to report information at intake and two follow-up encounters. Between the time they entered the program and the time of their first follow-up, 54% reported improved CD4 counts and 82% improved viral loads. Between the time of their first and second follow-ups, CD4 counts improved for 51% and viral loads improved for 48%. Thus, participants benefit quickly from participation in these programs and continue to benefit if they remain.

### Improvements in CD4 Counts and Viral Loads by Medications at Intake



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