

INTRODUCTION

- The Human Immunodeficiency Virus (HIV) is a sexually transmitted disease that slowly kills CD4+ cells leading to immune dysfunction.
- Disease progression can be measured by CD4+ count and number of viral copies in the blood.

METHODS

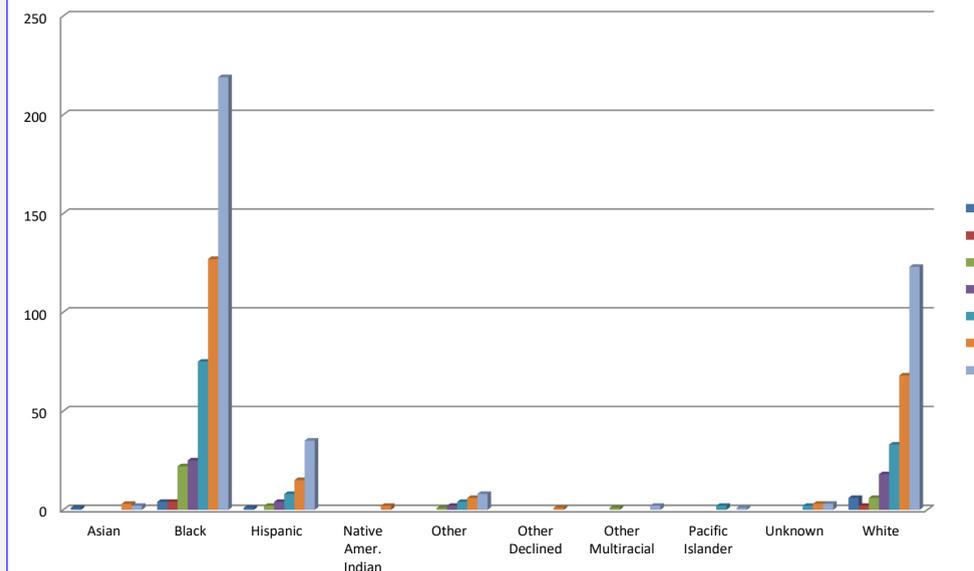
- Data was taken from outpatient clinics at Truman Medical Center
- Each patient was assigned a score from one to four to measure CD4+ count, with one being the lowest count and therefore the worst.
- Each patient was assigned a separate score from one to four to measure viral load with one being the highest number of copies and therefore the worst.
- Both scores were added together to get a total measurement of immune function from two to eight, with eight being the best functioning immune system.

| | 1 | 2 | 3 | 4 |
|---------------------------|----------|----------------|--------------------|--------------|
| Viral Load (in copies/mL) | >100,000 | 50,000-100,000 | Detectable <50,000 | Undetectable |
| CD4+ count per mL | <100 | 100-199 | 200-500 | >500 |

RESULTS

- Of an original 855 patients, 841 could be used because they had complete data.
- Twelve patients (1.43%) fell into the worst category with immune function score of 2.
- Six (0.71%) and thirty-two (3.80%) patients were doing slightly better and fell into groups 3 and 4 respectively.
- These fifty patients had an immune function score of four or less.

Immune Status by Race



- The average immune function score was 6.99.

CONCLUSION

- There were fifty patients (5.94%) who were severely immunocompromised.
- Trends were noted in immune function between gender and age groups, but they were not significant.
- There were only a substantial number of Black, Hispanic, and White patients, with no significant difference between these groups.
- Asians and Pacific Islanders as well as transgender patients seemed to have worse average immune function, but this could not be proven significant.

LIMITATIONS

- This experiment was limited by size, where some trends may become significant if there were more patients
- It was also limited by the data's lack of inclusion of comorbidities and treatments

Credits/Disclosures/References

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