# COVID-19 Vaccination in an Inner City HIV Clinic

Sandhya Nagarakanti, Eliahu Bishburg Newark Beth Israel Medical Center, Newark, NJ 201 Lyons Ave, G-3, Newark, NJ 07112 Ph: 973-926-5212 Fax: 973-926-8182 Sandhya.Nagarakanti@rwjbh.org

## BACKGROUND

- > Patients living with HIV (PLWH) are more likely to be hospitalized and experience increased rates of death from COVID-19.
- > COVID-19 vaccination are safe with no significant serious life threatening side effects.
- > COVID vaccines have been shown to reduce hospitalization and death from COVID pneumonia.
- > COVID-19 vaccination rate for general population in the state of NJ is 74.9%.

### **OBJECTIVES**

- > To analyze COVID-19 vaccination rates in our HIV out patient clinic.
- > To compare the incidence of COVID-19 infection between vaccinated and unvaccinated HIV pts.
- > To compare the severity of COVID-19 infection requiring hospitalization between vaccinated and unvaccinated HIV pts.
- > To assess mortality rate from COVID-19 between vaccinated and unvaccinated HIV pts.

#### METHODS

- > Retrospective review in an outpatient HIV clinic in Newark NJ
- > Study period 12/01/2020 12/30/2021.
- > Data was collected on
  - > Demographics,
  - > CD4 count,
  - > HIV Viral loads (VL),
  - > Type of the COVID-19 vaccine received
  - > Number of vaccines received
  - > Incidence of COVID-19 infection in vaccinated and unvaccinated pts
  - > Outcome of COVID-19 infection in vaccinated and unvaccinated pts.
- > Student t-test used for comparison.

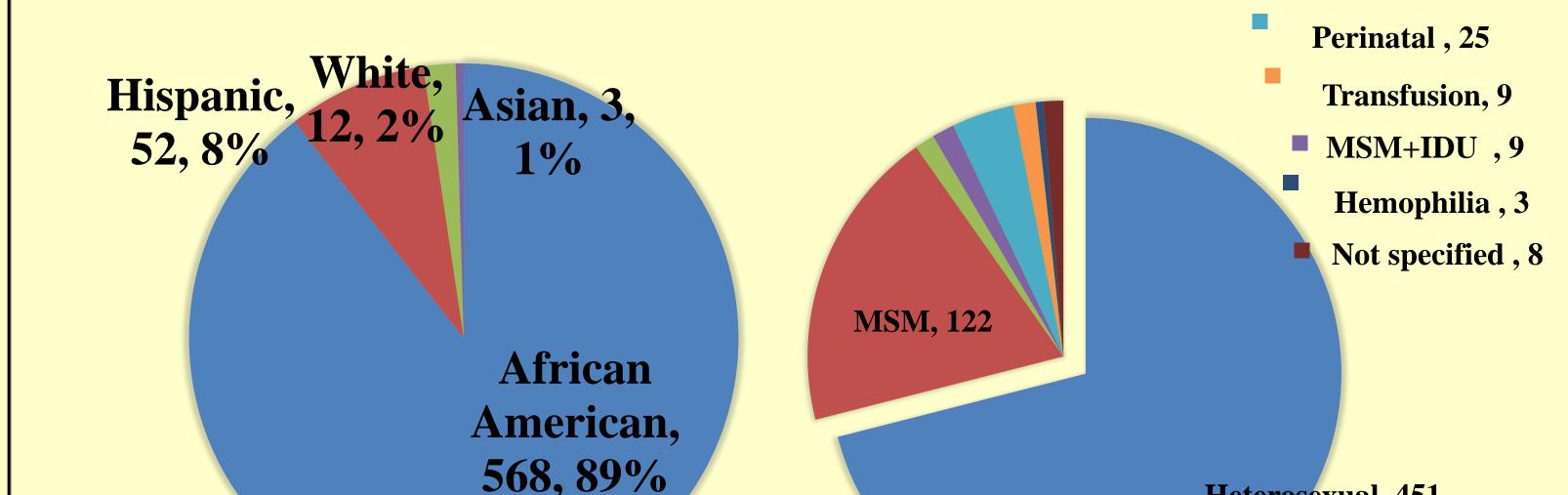
### > A total of 635 pts were seen in clinic during the study period

RESULTS

- ➤ Median age 53years (Range 33-84) Males 316 (49.7%), transgender 3 (0.48%).

Number of patients

by Race



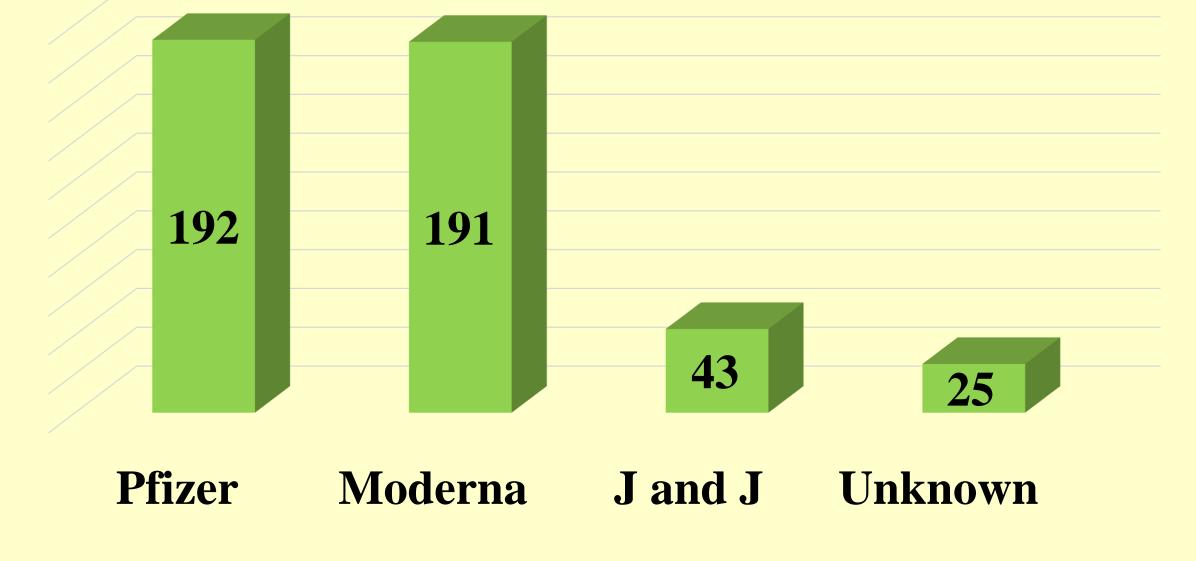
**HIV-Risk Factor** 

Heterosexual, 451

IDU, 8

# 587 Baseline CD4 and HIV VL (N=635) 562 Number of pts with HIV VL <200 Number of pts with CD4 copies/ ml >200cells/mm3

### Type of vaccine received



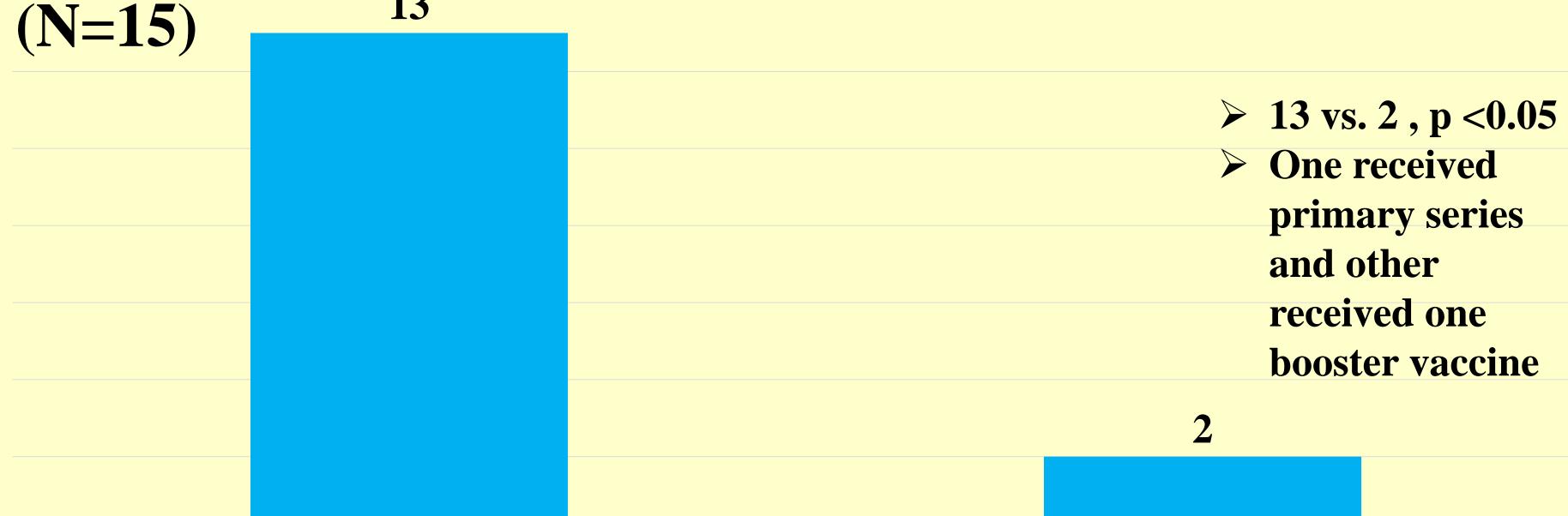
- > Primary series completed in 442 (69.6%) pts.
- **Booster dose in 126 (28.5%).**
- $\triangleright$  Incomplete immunization in 7(4.4%).

### RESULTS





### Number of pts hospitalized with COVID-19 infection



- $\gt$  Number of pts with CD4 > 200 cells/mm<sup>3</sup> 46/49(94 %) vs. 16/18 (88.8%) (p=NS)
- $\triangleright$  Number of pts with HIV VL < 200copies/mL 46/49 (94%) vs.17/18(94%) (p=NS).
- > One unvaccinated pt expired from COVID-19.

Unvaccinated

### CONCLUSIONS

- > In our outpatient HIV clinic, PLWH had vaccine acceptance rates similar to the general population.
- > More unvaccinated became infected and hospitalized than vaccinated pts.
- > There was no difference in CD4 and HIV VL in COVID infected pts who were vaccinated vs. unvaccinated pts.

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Vaccinated