

The Role of the Nurse Practitioner in HIV Care

The Three Bridges Shared Care Model



Goals of the HIV Shared Care Program

- *To improve access to primary HIV care for difficult to reach populations*
- *To demonstrate the feasibility of registered nurse initiated follow up of the relatively well HIV population*
- *To attempt to improve the overall health status of the Three Bridges shared care patient population*

The role of the HIV Shared Care Nurse

- *To monitor healthy HIV patients by providing blood work, functional inquiry and physical assessment*
- *To attend to general primary care activities such as educational needs, preventative health measures such as immunizations , infectious disease screening and Mantoux testing.*
- *To provide supportive nursing care*
- *To work collaboratively with the physician in managing more complex patients*

The Development of a General HIV Shared Care Patient Work Sheet

- *Provides a summary of the patient's HIV history, PMH, Meds, Allergies, Social situation, available support etc*
- *Provides a summary of immunizations, preventative health procedures and baseline measurements such as V/A*
- *Provides a continual record of weight, blood results, which are recorded in such a fashion as to easily denote trends*
- *Provides a record of teaching topics as well as annual routine screens such as RPRs, CMV and Toxoplasmosis*

Shared Care Patient Groups

- Healthy Well HIV Positives
- Less well HIV Positives who attend regularly and receive joint care from the physician and the nurse/nurse practitioner
- Marginalized high risk HIV positive patients who have difficulty accessing care due to addictions, lifestyle or mental illness
- Failure the thrive HIV positive patients who access the clinic regularly

Evaluation of the Shared Care Program

Prior to the start of the shared care program, 10 HIV charts were randomly pulled from the Three Bridges computer registry. They were assessed for baseline primary care indicators such as

- ◆ *Immunizations*
- ◆ *Annual Mantoux, CMV, Toxo, RPR screening as appropriate*
- ◆ *Approximately 67 % of these indicators were met*
- ◆ *This is consistent with a study done by a PharmD student at the clinic looking at Hep B immunizations in our HIV population*

Shared Care Patient Data

- The HIV primary care evaluation was done on 12 patients that had started the HIV shared care program from the beginning and who had participated for a full year
- This group was statistically evaluated using a student's t- test on the Microsoft word Excel© program and the following comparisons were made
 - ◆ The HIV Shared Care Group was compared to the group that was sampled prior to the initiation of the shared care program
 - ◆ The HIV Shared Care Group was also evaluated comparing laboratory data that included Viral Load and CD4 Counts at the start of Shared Care and approximately one year after being in the program

Preventative Care Parameters

Hep A Immunization Score

Hep B Immunization Score

Pneumovax Score

Mantoux Score

Td Score

Fluviral Score

Pap Screen

CMV Screen

Toxo Screen

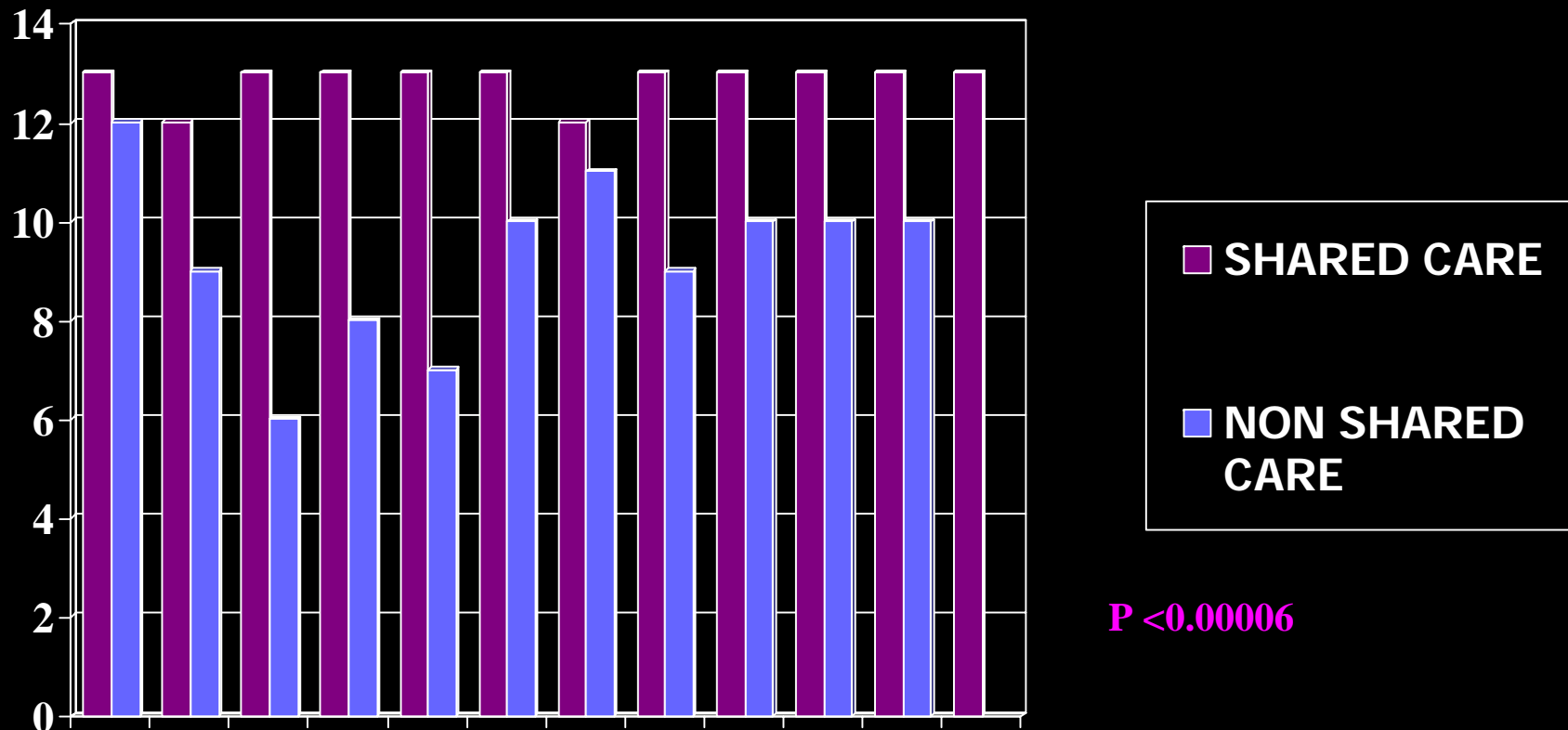
RPR

Total Score out of 13

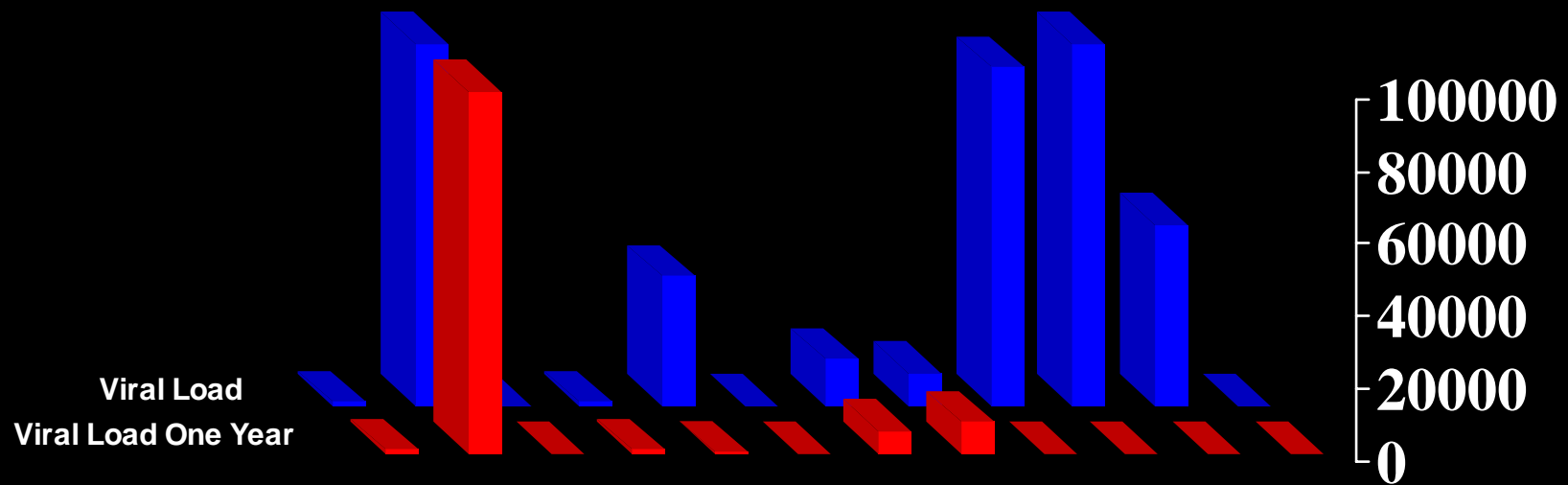
Note: Male patients were scored simply by adding one point to their total to account for the lack of Pap testing in this group

HIV Shared Care Primary Health Care Parameters

Pre Shared Care Random Chart Audit vs the Shared Care Group at One Year

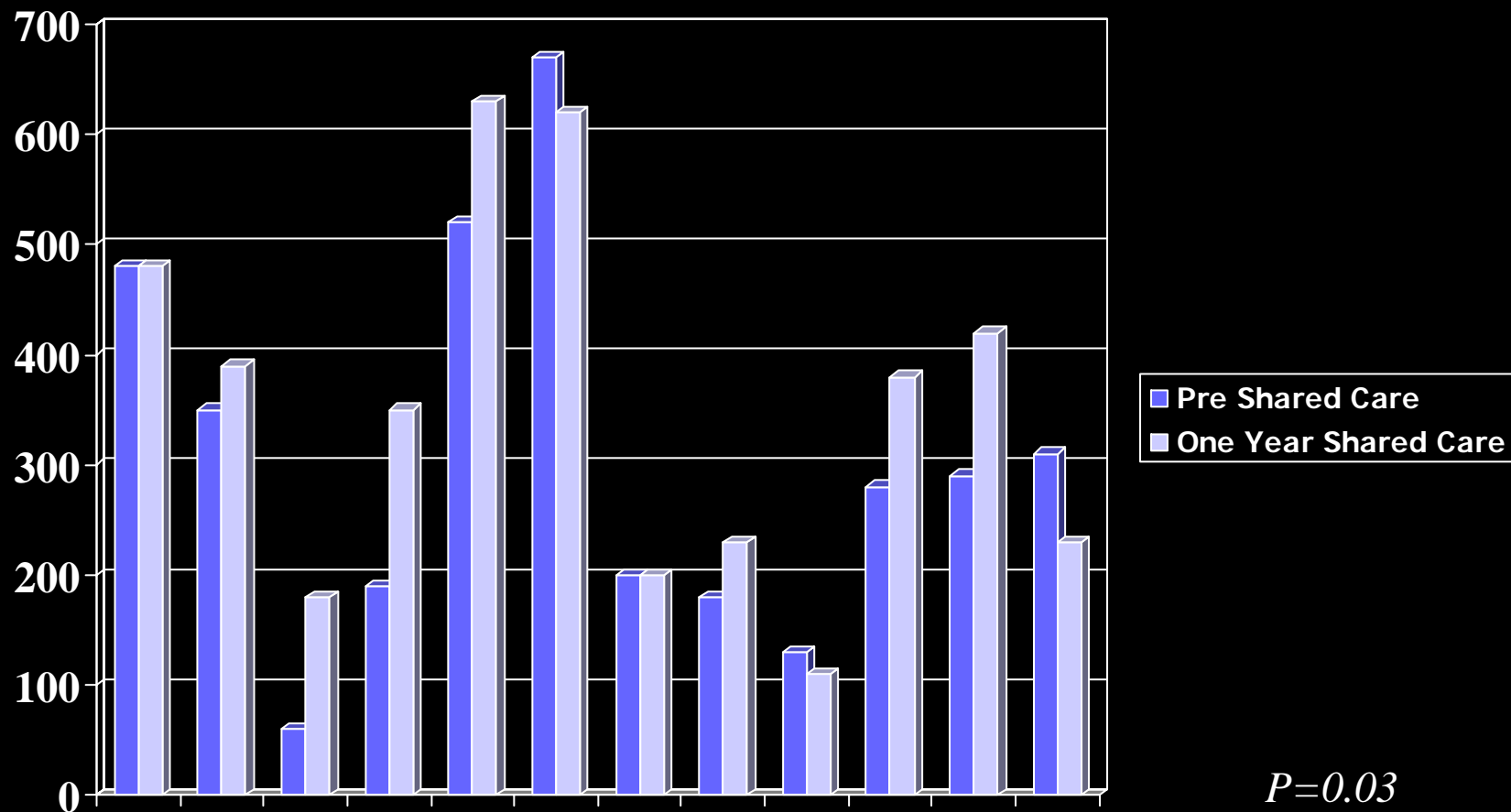


Viral Loads at the Start of HIV Shared Care and at One Year



$P=0.047$

Initial CD4 Count and after One Year in Shared Care



Shared Care Outreach Program

The goal of this arm of the shared care program was to

- ◆ Target hard to reach populations who had sporadic contact with the clinic and little consistent primary care
- ◆ Target patients who were attending the clinic regularly but were experiencing failure to thrive with their ARV regime

Outreach Outcomes at 10 Months

- No formal evaluation as of yet
- Will discuss some successes this morning
- We anticipate that this will have a positive effect but still need a formal evaluation
- Current discussion will be case based

Case No 1

- 34 year old male with long standing history of HIV
- MSM & Crystal Meth use
- Visiting the clinic regularly about q 2/52 excellent medical care
- Prescribed ARVs; stated adherence
- CD4 was 10 or less than 10 in the previous 18 months
- Considering therapeutic drug monitoring

Findings on Home Visit

- Lived in a single room apartment in the DTES
- Hygiene was horrific layers of food, filth and flies
- Bubble packs were found half taken all over his room
- Also a bottle of someone else's ARVs
- Patient initially resistant to daily delivered meds or daily pick up

Nursing Interventions

- Months of therapeutic relationship building
- Supportive nursing care
- Advanced nursing care, physical examinations, blood draws, early intervention for abscesses, thrush etc.
- Patient initially tried adherence timers supplied by pharmacy; not working well
- Patient finally agreed to daily med pick up in a structured program
- Program would notify myself if there were any adherence issues

Outcomes at 10 months

- Last CD4 count was 150
- Gained weight
- Looks tremendous
- Regular adherence to meds
- Considering drug treatment

Case No 2

- 28 year old male
- MSM & Crystal Meth
- Schizophrenia
- Sporadic HIV Care average once or twice a year
- CD4 = 70

Nursing Interventions

During home visits:

- Regular bloodwork done
- Regular physical exams done
- Early interventions for thrush/ seborrheic dermatitis = comfort care
- Put on PCP prophylaxis
- Supportive nursing care
- Develop therapeutic relationship
- Early interventions/referral for complications

Outcomes

- Connected with structured ARV support program
- Started on ARVs
- Last CD4 was 220
- Just went into treatment for crystal meth but unfortunately only stayed for a few days

Take Home Message

- Often what makes the difference for patients is supportive nursing care
- We need to take primary care to marginalized patients who do not access regular care
- Nurses are ideally suited to provide this type of care
- We need to maximize nursing interventions
- Improved access can be accomplished through regular supportive nursing care
- Improved access can make the difference between who thrives with HIV and who does not survive

Nurse Practitioners

- Can provide advanced levels of primary care for HIV positive patients
- Registered nurses can provide most of the key components in primary HIV care
- A collaborative team with nurses, nurse practitioners and physicians is ideal

Final Thoughts

- Nursing plays a critical role in HIV care
- There is something unique and special about the way we as nurses come along side people in their struggles
- Nursing is the art of nurturing human resilience
- It is truly both an honor and a privilege to be with people through some of the most difficult moments of their lives

“Nursing is an art: and if it is to be made an art, it requires an exclusive devotion as hard a preparation, as any painter's or sculptor's work ... It is one of the Fine Arts: I had almost said, the finest of Fine Arts.”

-Florence Nightingale