

# IMPROVING HIV TREATMENT ADHERENCE IN AN ETHNICALLY DIVERSE URBAN CLINIC

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Doctoral Project Committee:

David E. Kumrow, EdD, RN, CNS, Project Chair

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# How I got here...

- By God's grace
- Hard work and strong determination
- Sacrifice, prayers and support of family and church
- Love, nurturing, guidance and support of Mentors

# Background

## Human Immunodeficiency Virus /Acquired Immune Deficiency Syndrome (HIV/AIDS)

- Discovered early 1980's
- Over one million people known to be infected worldwide.
- Over 10,000 people die annually from HIV/AIDS in the United States.
- It is a lifetime disease without any known cure

(CDC, 2015; Vatanoglu, & Ataman; 2011)



# Background

- Autoimmune disease
- Transmitted via blood and body fluids

Progresses through three stages:

- Acute Infection
- Clinical Latency
- Acquired Immunodeficiency Syndrome (AIDS)

(CDC, 2015)

# Concern

- The treatment and containment of HIV/AIDS remain a major Public Health challenge for health care providers and a burden for society globally.
- This project's urban HIV treatment clinic reported a 33.3% non-adherence rate among its high risk clients at the beginning of 2015.

(Brawner, 2014; Vatanoglu & Ataman, 2011; Saleh, et al, 2011; )



# Literature Review

Focused on three major areas related to HIV treatment:

- Barriers and facilitators to HIV treatment adherence
- Care approaches and perception of HIV treatment providers
- Discussion of the Social Cognitive Theory (SCT) and the Logic Model as applied to this project.

# Literature Review

## Barriers

- Mental illness & Substance abuse
- Homelessness & Social Factors
- Healthcare System

(Aragonés, et al, 2011; Saleh, et al, 2011; Ramirez-Valles et al, 2013)



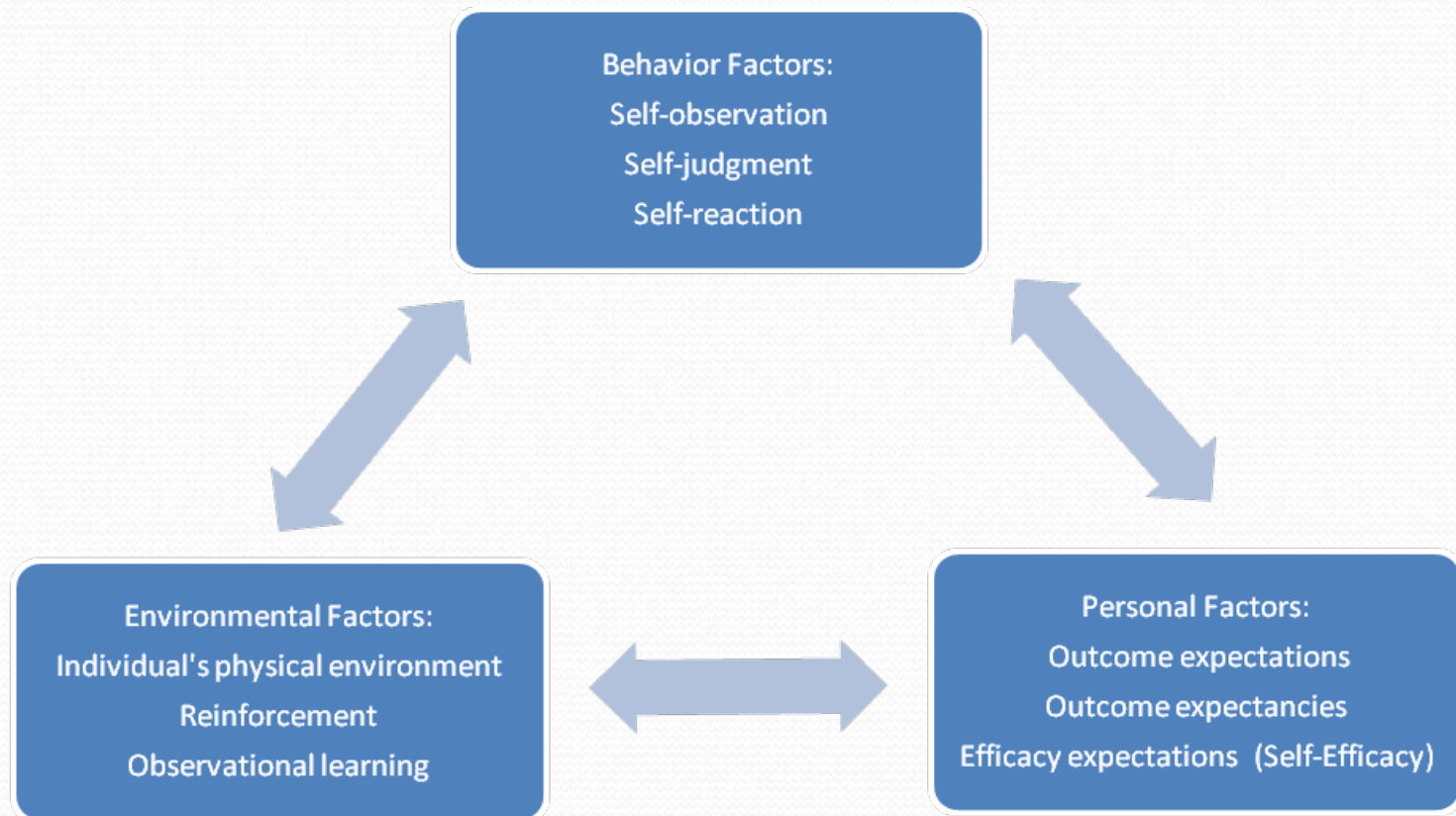
# Literature Review

- Investigations on the influence of race, gender and age on adherence are equivocal
- Higher incidence among homosexuals and intravenous drug users
- Older people living with HIV/AIDS who had other comorbidities were more likely to seek and adhere to treatment regimen

(Berkman et al, 2005; Chattu, 2015; Costa, et al, 2012; Remien, et al, 2003; Rogers et al, 2012; Sison et al, 2013).



# Theoretical Framework



(Bandura, Adams & Beyer, 1977; Bandura, 1997; Glanz & Rimer, 2005).

# Personal Factors

Factors that  
contributed to  
treatment non-  
adherence

- Health perception
- Self perception
- Substance abuse
- Mental illness
- Fear



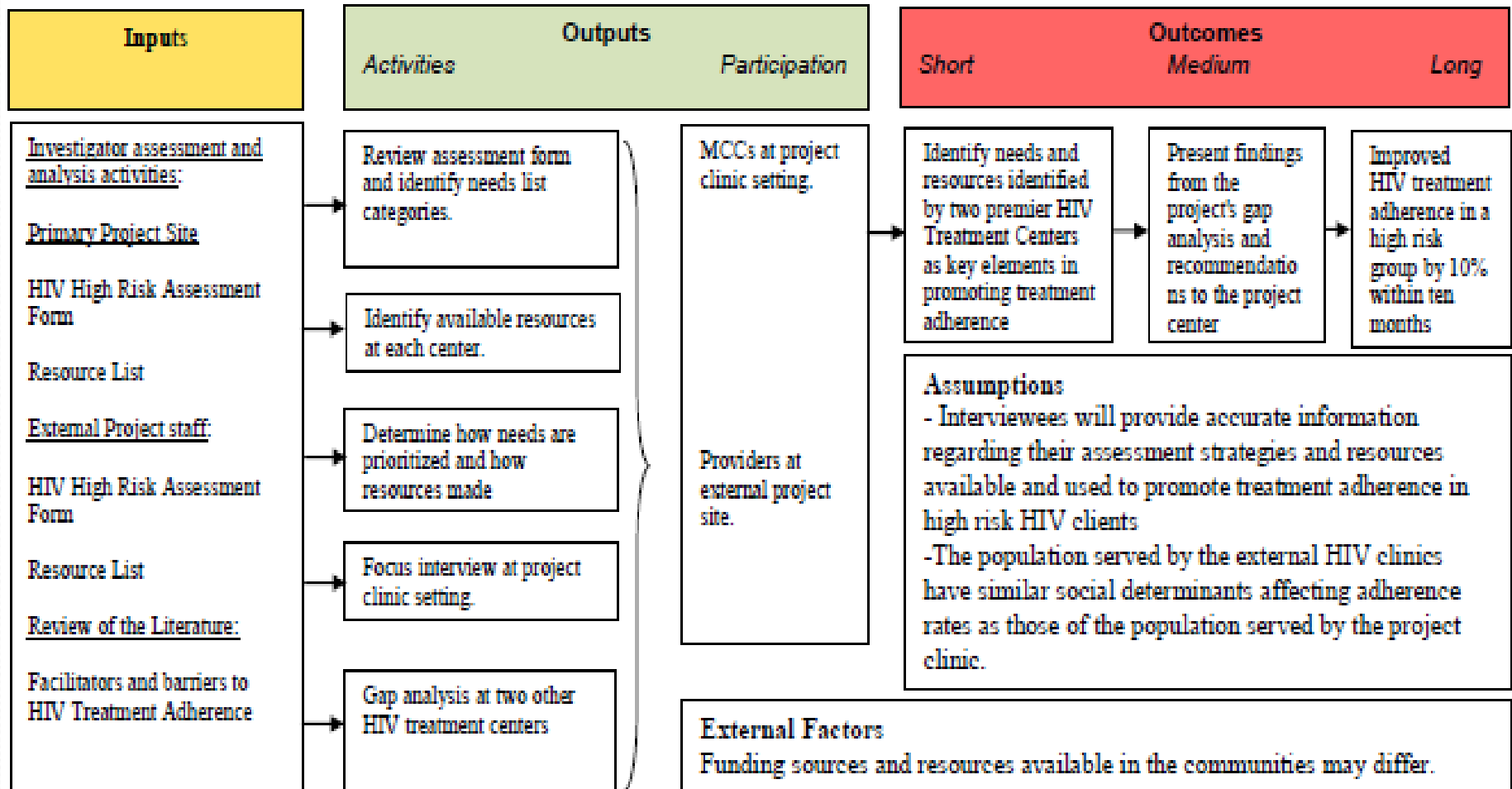
# Environmental Factors

Factors that  
contributed to  
treatment non-  
adherence

- Stigma
- Decreased access to treatment facility
- Interaction from care providers
- Lack of social support
- Employment status
- Housing status



# Logic Model



(CDC; 1999; Sundra, Scherer, & Anderson; 2003; Kellogg Foundation, 2004).

# Importance

- Non-adherence to HIV treatment regimen has been a primary contribution to the debilitating effect experienced by individuals infected with the disease.
- Clients who maintain a 95% or better adherence rate to their treatment regimen are more likely to consistently have an undetectable viral load, that is, below 200.

(Demmer, 2003; Lester et al., 2010, Remien, et al., 2003)

# Purpose

- To understand roles and perspective of healthcare providers in facilitating and improving treatment adherence rate of high risk clients in an ethnically diverse urban HIV treatment clinic.
- To identify barriers and facilitators to adherence.
- To identify factors in the social cognitive theory (SCT) theoretical framework guided by the logic model.
- To review best practices at each treatment clinic.
- To examine strategies of health care providers to increase the rate of adherence among people with HIV.
- To provide recommendations for improving adherence



# Research Questions

- What factors contribute to non-adherence?
- How may health care providers increase the rate of HIV treatment adherence?

# Method

## **Participants**

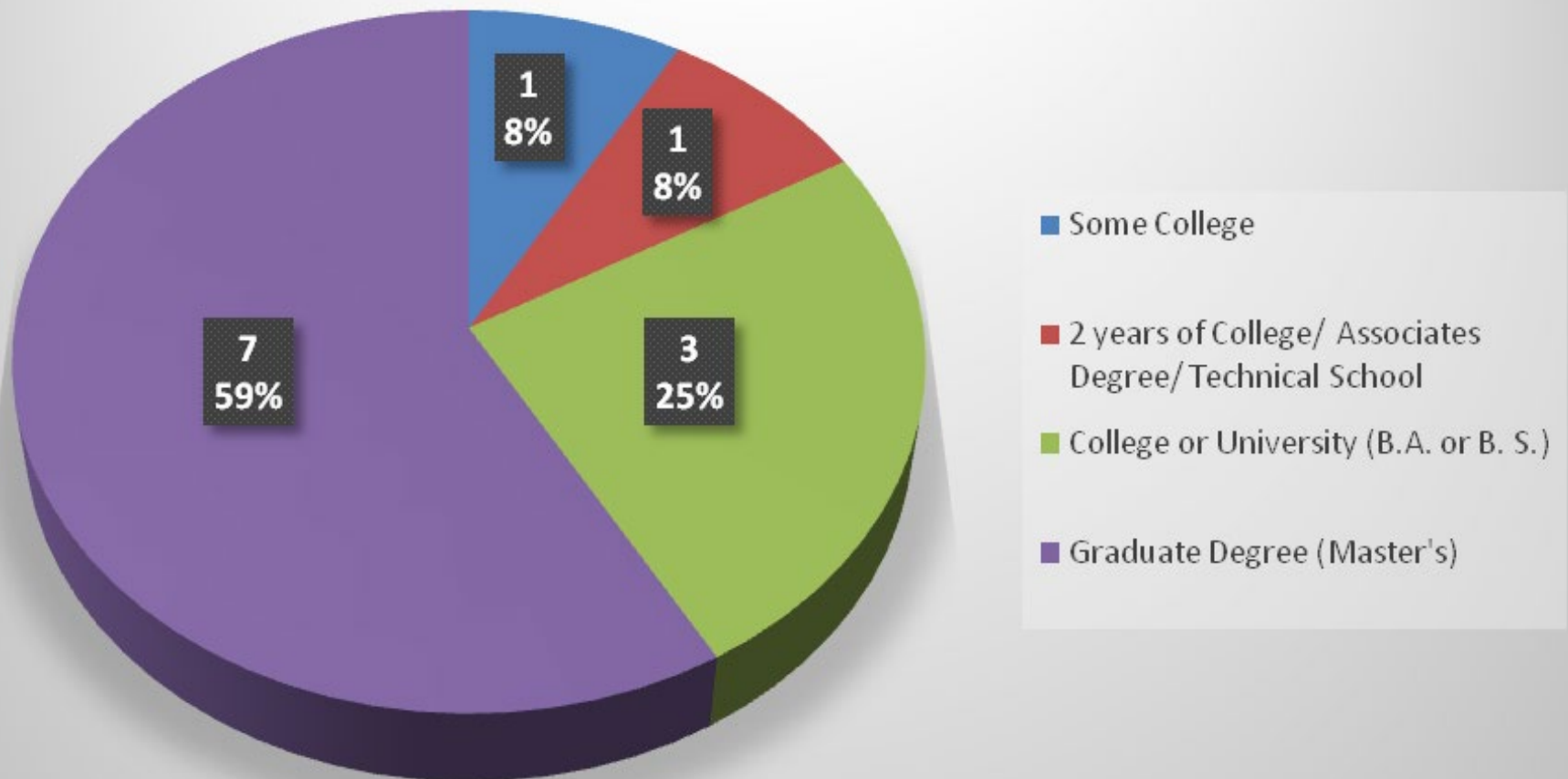
- Twelve (12) ethnically diverse healthcare providers aged 28 to 62 years
- From three HIV treatment clinics
- Participants were identified by the clinic administrator at each of the three clinics for participation based on their role

# Participant Provider Demography

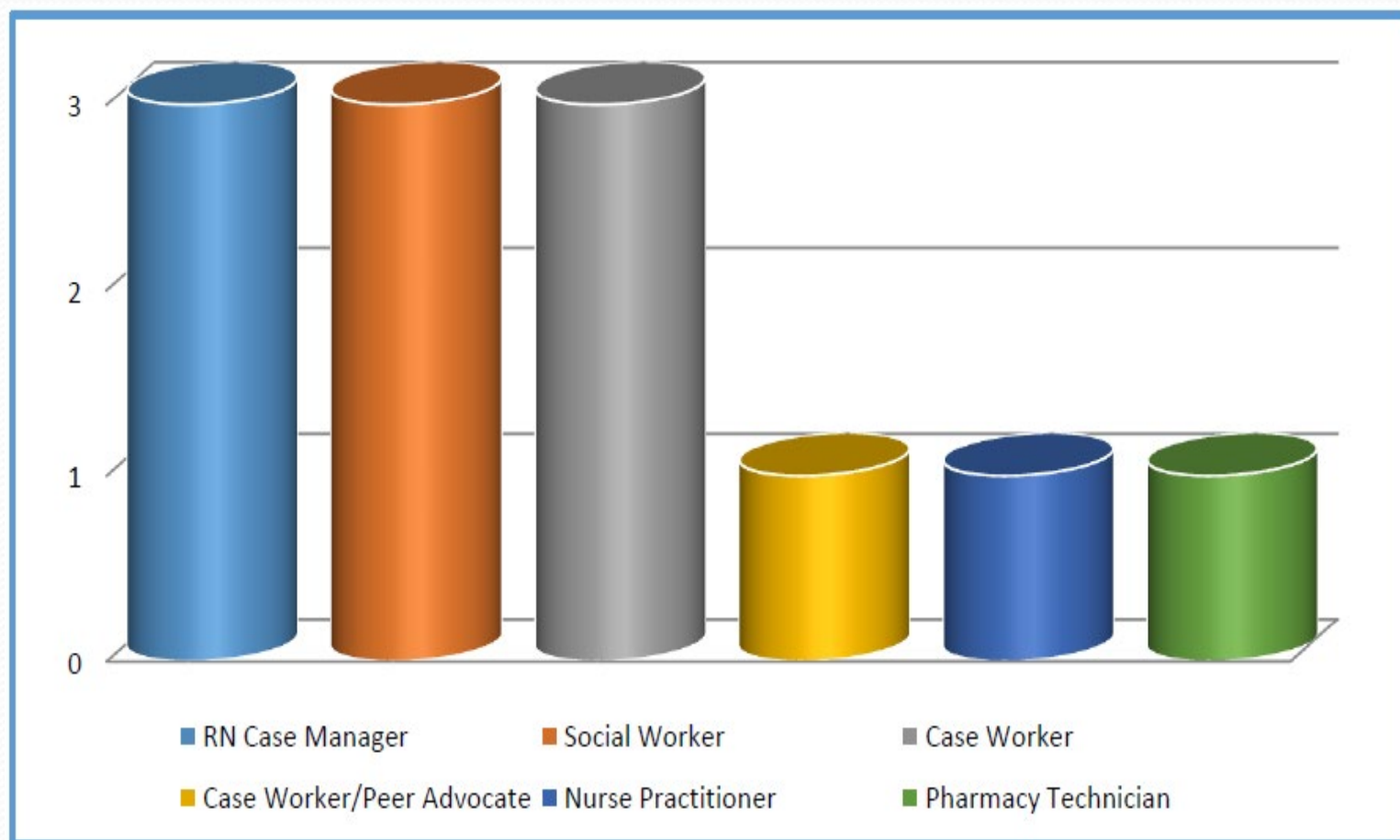
Provider Demographics (n = 12)	
Male	4
Female	8
Mean Age	42.6yrs
Ethnicity	
Asian/ Pacific Islander	2
Black/African American	3
Hispanic/Latino	4
Native American/American Indian	-
White/Caucasian (non -Hispanic)	2
Other Ethnicity-mixed	1
Educational Level	
2 years of College/ Associates Degree/ Technical School	1
College or University (B.A. or B. S.)	3
Graduate Degree (Master's)	7
Some College	1
Sexual Orientation	
Gay/ Lesbian/ Homosexual	3
Straight/ Heterosexual	8
Bisexual	1
Other	-



## Participants Education Level



# Participants' Roles



# Method

## **Setting**

- Three urban HIV treatment clinic settings with similar treatment programs
  - Ryan White Funded
  - City /State Funded
  - Private Donations

## **Instrument**

- Semi-structured interview
  - Scripted open-ended questions
  - Demography Questions
  - Interview Questions



# Method

## Procedure

- Approach was descriptive, qualitative using semi-structured interviews
- Concepts or themes were assessed as they related to personal and environmental factors, which contributed to the client's adherence behavior.
- Interviews were conducted privately at the provider's clinic in a private room.
- All, except one, interviews were tape recorded and transcribed

# Data Analysis

- Interviews transcribed
- Interviews were transcribed
- Analyzed with Dedoose 7.0.16 qualitative analysis software and research experts
- Identified themes related to factors influencing non-adherence
- Identified Resources/Interventions (guided by SCT) that promoted adherence
- Rated patient non-adherence
- Identified Case management approaches

# Themes of Factors Related to Non-adherence

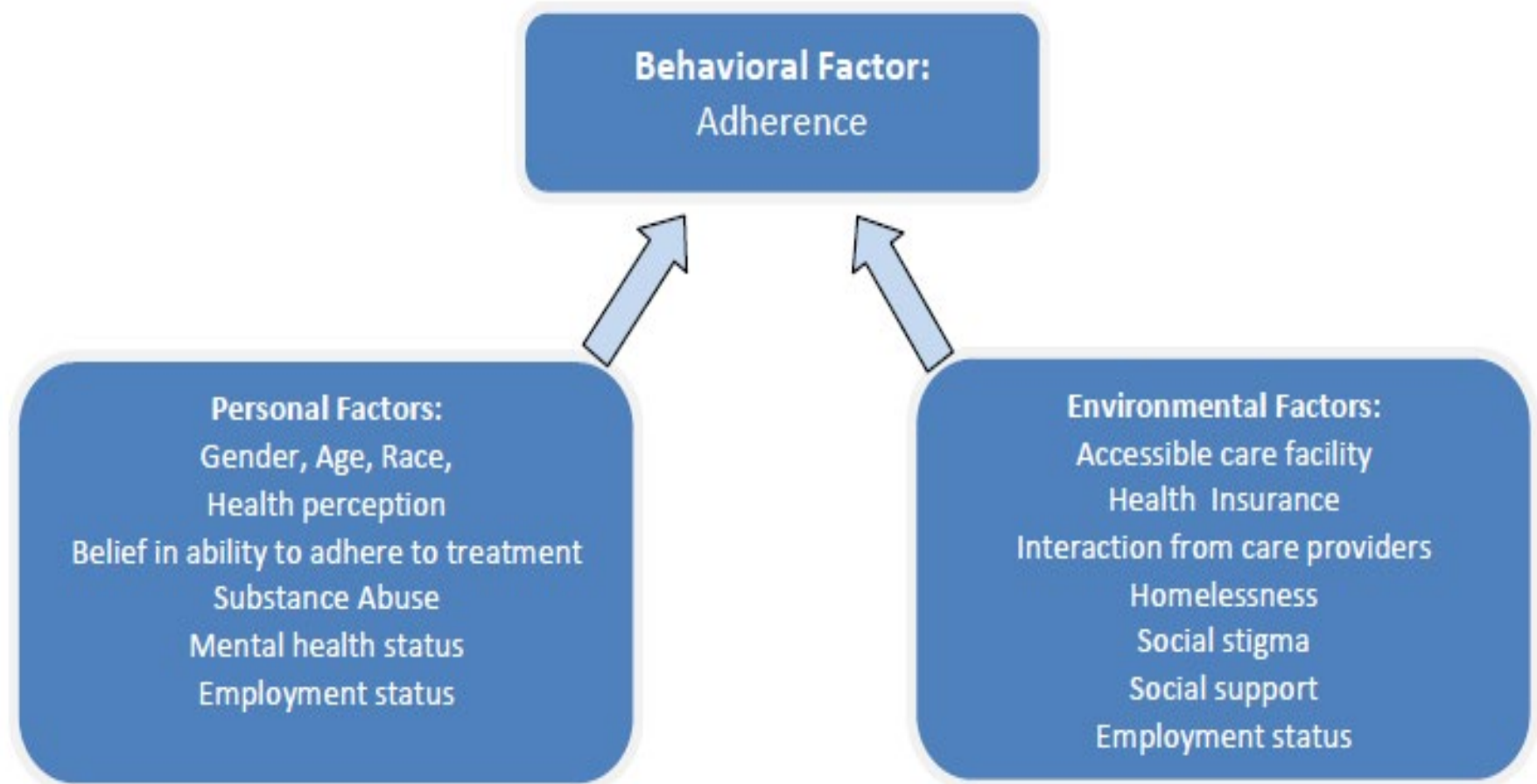
Themes	Adherence Facilitators	Adherence Barriers
<b>Theme 1:</b> <b>Personal Factors</b>	Motivation & will to live Encouraged by positive health outcome: (CD4 Count)	Shame and Fear Mental Health issues Substance Abuse Unemployment Homelessness New diagnosis Lack of education about the disease
<b>Theme 2:</b> <b>Environmental Factors</b>	Social support-Support groups Support from health care team Care coordination Trust in care provider Welcoming healthcare atmosphere Easy access to health care provider Clinic provided resources: transportation, food, housing assistance	Stigma Medication cost Under or uninsured Lack of transportation Pill burden/ other illness Fragmented health care system Lack of diverse health providers Lack of support from friends and family



# Findings

- Personal and Environmental Barriers to Adherence
  - Mental health issues
  - Substance abuse
  - Social support
  - Self-efficacy
  - Living arrangements

# SCT Applied to Project Outcomes



# Findings

- Healthcare System Barriers to Adherence
  - Fragmented and limited access to specialized services
  - Clinic service hours conflicting with clients schedule
  - Bureaucratic issues relating to insurance coverage
  - Structured/Rigid criterion of assessment process
  - Lack of cultural diversity among providers
  - Limited staff and resources



# Findings

- Participants' Feelings Towards Clients
  - Positive
  - Empathetic
  - Frustration
  - Disappointment

# Findings

## Incentives for Adherence

Love, Compassion & Staff Support
Transportation
Support Groups & Self Motivation
Pharmacy Support
Food
Assistance with Housing
Seeing Improvement in Health Condition



# Participant Quotes

- "Make them feel loved and that we care about them genuinely ..."
- "I think that is a big incentive to being in the clinic, to have people that actually care about your well being, and want you to be healthy, and want you to benefit from all this research".



# Participant Quotes

- "I'm kind of obviously gay. So it makes some of the gay patients in the waiting room feel..., so I think it makes them feel a little more relaxed to know that someone is.., I think they feel like they can trust someone or that someone's looking out for them...that they have a relationship".

# Participant Quotes

- “When they see that their viral load starts at 50000 toppings and within three months they’re undetectable.. that is so exciting for them and for me”
- “If they’re homeless, they’ll give them shelter and link them to a housing specialist, or housing program that will help them with transitional housing or permanent housing”.



# Conclusions

In a study of three HIV treatment settings:

- Clients' personal, social and environmental factors influenced their adherence to treatment.
- Providers' attitudes and practices contributed to the clients' adherence to treatment.
- Providers placed greater emphasis on client behaviors as affecting adherence rather than barriers relating to the healthcare system.



# Recommendations

## Implementation:

- Pharmacological Assessment and Interaction by Pharmacist and Pharmacy Technician
- Collaborate, Compare and Integrate Assessment tools

# Recommendations

Long term studies:

- Healthcare Providers
- Dynamics of the healthcare system
- Insurance systems

# Project Limitations

- Participants' Self Awareness
- Participants' Perception
- Diplomacy



# Notable Outcome of Strategy

- Clinic A implemented a second MCC Team
- Adherence rate increased over 5% within 10 months

# Review of Project Phases

<b>Phase 1</b>	<b>Review of literature and client assessment form</b>
<b>Phase 2</b>	<b>Developed topics and open-ended questions for the interviews</b>
<b>Phase 3</b>	<b>Conducted semi-structured interviews</b>
<b>Phase 4</b>	<b>Analysis of the narrative data</b>
<b>Phase 5</b>	<b>Conducted gap analysis of what existed at the clinics and recommendations strategies to improve treatment adherence</b>

# Summary

- Implementing recommendations from this project will have a positive impact on improving HIV treatment adherence.





THANK YOU