CLINICAL APPROACHES TO SUPPORTING PATIENTS RETURNING TO HIV CARE

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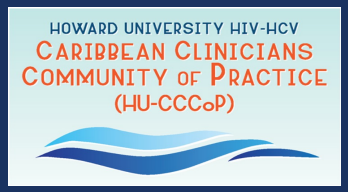

CME Disclosures:
Planning Committee And Speaker

Speaker: The following speaker has nothing to disclose in relation to this activity: Dale Babb, MBBS, MSc, DTM&H

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Goulda A. Downer, PHD, RD, LN, CNS – Principal Investigator/Project Director

CME Disclosures:
Planning Committee And Speaker

Howard University Telehealth Training Center
Planning Committee: The following committee members have nothing to disclose in relation to this activity:

Goulda A. Downer, PhD, RD, LN, CNS
Walter Bland, MD
John McNeil, MD, FACP
Denise Bailey, M.ED

Speaker: The speaker Dr. Dale Babb disclosure statement is included in the presentation.

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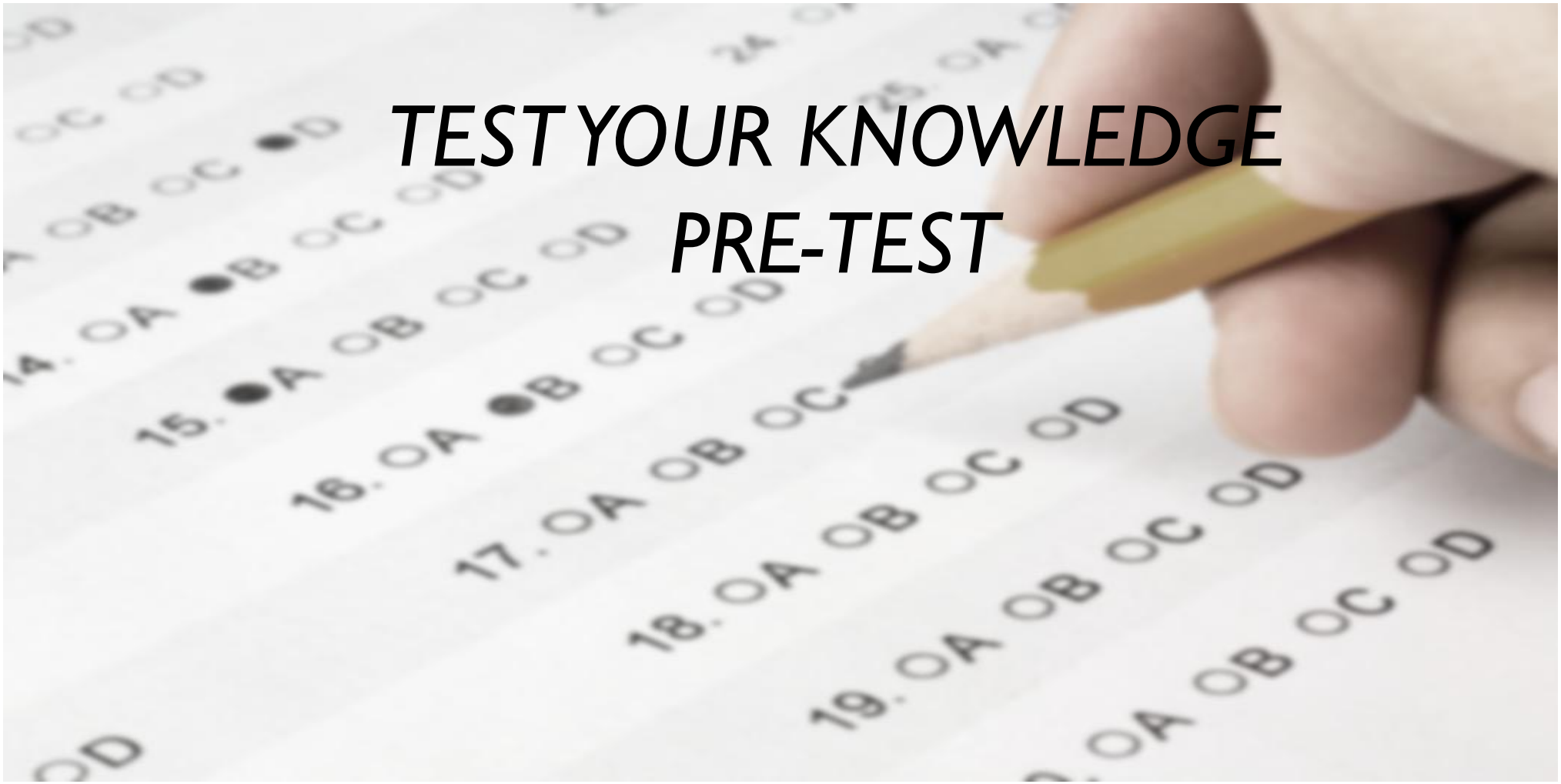

TEST YOUR KNOWLEDGE
PRE-TEST

Test Your Knowledge
Question #1

Which of the following statement is True? Choose the best response

A. Retention in HIV care is not related to a client's continuous engagement with the health services or in medical care

B. Retention in HIV is defined as a patient who misses less than 3 clinic visits per year

C. Retention in HIV care is challenging to define and measure as there is no single accepted universal definition

D. A and B

Test Your Knowledge
Question #2

What factors may predict altered patient attendance for regular ongoing care in the Caribbean?

A. Female gender

B. Higher socioeconomic status

C. Belonging to a minority race or ethnicity

D. A lack of health insurance

Test Your Knowledge
Question #3

What are the most common reasons for non-retention in HIV care? Choose the best response.

A. Active substance abuse

B. Advanced age

C. Lack of social support

D. Active psychiatric illness

Test Your Knowledge
Question #4

Strategies to support retention of clients in HIV care includes which of the following? Choose the best response.

A. Reinforcing positive behaviours to adopt a positive relationship between clients and providers

B. Making decisions without the clients as they are not compliant

C. Stopping benefits for clients to force them to return to clinic to receive benefits

D. Insisting on patient attendance at clinic to continue ongoing treatment

CLINICAL APPROACHES TO SUPPORTING PATIENTS RETURNING TO HIV CARE

LEARNING OBJECTIVES

By the end of this session participants will be able to:

1. Discuss the terminologies used to describe non-retention in care
2. Describe the main predictors and reasons for non-retention in HIV care
3. Explain strategies and approaches for addressing non-retention of patients in HIV care
4. Demonstrate methods available to support noncompliant patients in their return to treatment and retention in care

DEFINITIONS AND TERMINOLOGY

- Retention in care challenging to define and measure as there no single accepted definition, no "gold standard"
- Examples:
  - Remaining connected to medical care, once entered
  - Patients known to be alive and receiving treatment
  - Based on frequency of clinic visits (2 weeks to 1 year)
  - Based on number of viral load tests per year
- Additionally – varying terms used
  - Lost to follow up
  - Attrition
  - Defaulted

1. Mbuagbaw L et al. Strategies to improve adherence to antiretroviral therapy and retention in care for people living with HIV in high-income countries: a protocol for an overview of systematic reviews. BMJ Open 2018;8:e022982
2. Stricker SM et al. Retention in care and adherence to ART are critical elements of HIV care interventions. AIDS Behav. 2014;18 Suppl 5:S465-75.

DEFINITIONS AND TERMINOLOGY (2)

Standard Operating Procedures for Returning HIV Clients to Care in Barbados

Definition of Default/Non-retention

- Missed ≥ 2 consecutive, scheduled clinic appointments over the past 12 months
- Has not attended any clinic appointments, had a viral load/CD4 test done, or picked up medication in 12 months
- Resilient defaulters, further defined as those who cannot be contacted, or located by telephone or house visit, after 6 months of active effort

1. HIV/STI Program Ministry of Health and Wellness. Standard Operating Procedures for Returning HIV Clients to Care in Barbados. 2017. 7 p.

INTRODUCTION

- Poor patient retention undermines program and patient outcomes, including achieving sustained viral suppression
- The global effort to increase the number of people on Antiretroviral Therapy (ART) needs to ensure that people taking ART are retained in chronic care for life
- Sustained regular HIV care is critical for overall health of HIV infected patients and for prevention of HIV transmission
- Retention in ART programs is a major challenge in all settings and across populations, specifically pediatric and adolescent populations, postpartum women and men

1. World Health Organization. Retention in HIV programmes: Defining the challenges and identifying solutions. Meeting Report 13-15 September 2011. Geneva: 2011.
2. HIV – Retention in Care [cited 2023 Feb 14] . Available from: https://www.cdc.gov/hiv/clinicians/treatment/care-retention.html

REVIEW OF EVIDENCE – RETENTION IN CARE

- Main predictors of non-retention
  - Developed countries - substance abuse, psychiatric illness, social issues
  - Developing countries - stage of illness, male sex, lower level of education, practical issues e.g., transportation and access
  - *Younger age* consistent across most studies
- Social and psychosocial support associated with good retention
- Early linkage to care was associated with longer term retention in care
- Many authors echoed the need for quantitative studies to bolster the abundance of qualitative evidence that exists

1. Bulsara et al. Predictors of Adult Retention in HIV Care: A Systematic Review. AIDS Behav. 2018;22(3):752-64.
2. Holtzman CW et al. Mapping patient-identified barriers and facilitators to retention in HIV care and ART adherence to Andersen's Behavioral Model. AIDS Care. 2015;27(7):817-28.
3. Yehia BR et al. Barriers and facilitators to patient retention in HIV care. BMC Infect Dis. 2015;15:246.

RATES OF RETENTION

- Rates of retention and attrition vary widely across programmes
- In the United States, in 2018, approximately 58% of persons with HIV were retained in care, defined as having at least 2 CD4 cell counts, or HIV RNA levels obtained that year [1]
- One observational study in the US showed an attrition rate of 43% [2] while a Ugandan study of similar size demonstrated an attrition rate of approximately 30% [3]
- 20% of PLHIV in Canada have "discontinuous" care

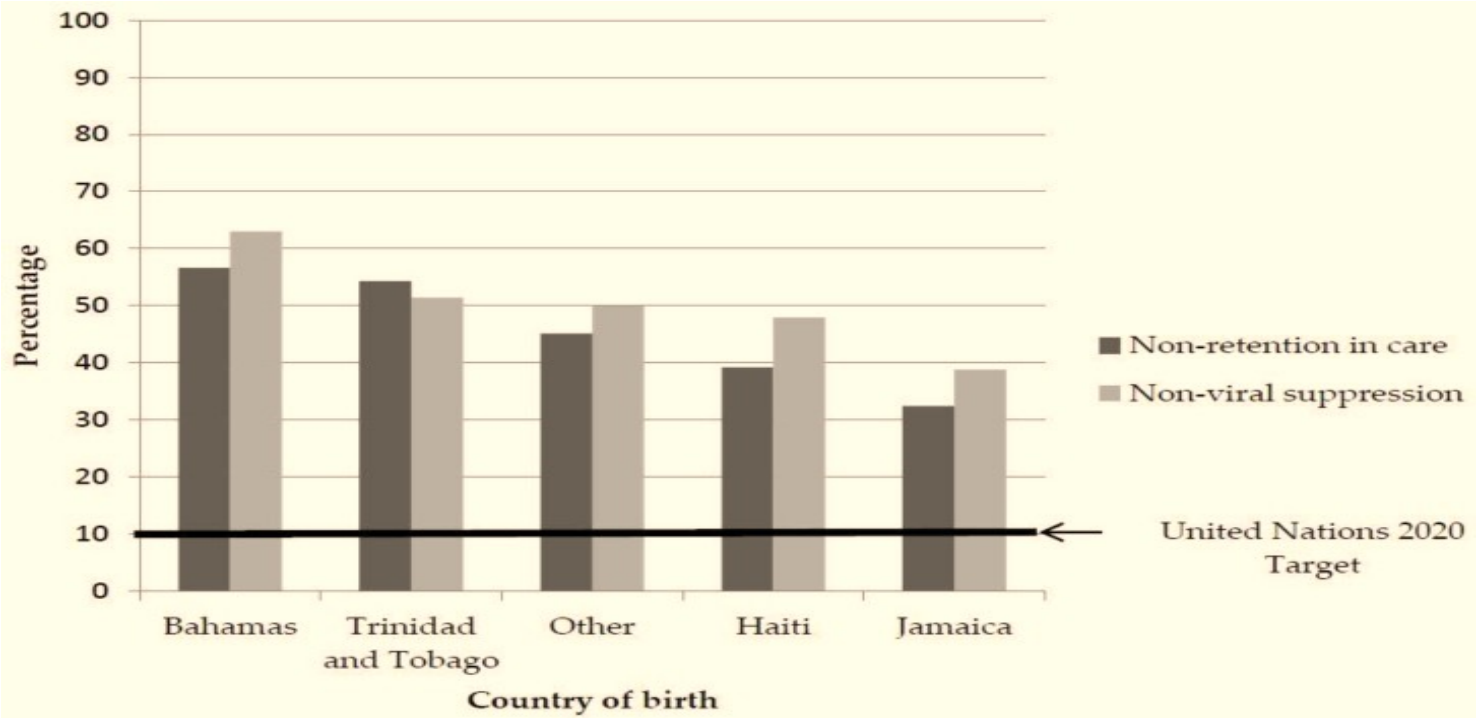
1. Roscoe C et al. Retention in HIV Care. 2020 September 10, 2020. In: National HIV Curriculum. University of Washington. Available from: https://www.hiv.uw.edu/go/basic-primary-care/retention-care/core-concept/all.
2. Crawford TN. Poor retention in care one-year after viral suppression: a significant predictor of viral rebound. AIDS Care. 2014;26(11):1393-9.
3. Boeke CE et al. Assessing linkage to and retention in care among HIV patients in Uganda and identifying opportunities for health systems strengthening: a descriptive study. BMC Infect Dis. 2018;18(1):138

PREVALENCE OF NON-RETENTION

- The 2020 United Nations goal - 10% or less of HIV infected individuals being non-retained in care or achieving viral suppression, (non-Hispanic Caribbean immigrants are far from this goal)
- PLWHIV from **Bahamas, Trinidad and Tobago, and Haiti** had the highest percentages of non-retention: 56.6%, 54.3%, 39.2%;
- PLWHIV from **Bahamas, Trinidad and Tobago, and Haiti** - non-viral suppression (non-viral suppression: 63.0%, 51.4%, 47.9%).
- Cases from Jamaica did not differ statistically from any of the reference groups

Int J Environ Res Public Health. 2017 Mar; 14(3): 285.

UNITED NATIONS TARGET VS CARIBBEAN COUNTRIES



Int J Environ Res Public Health. 2017 Mar; 14(3): 285.

REVIEW OF EVIDENCE – RETENTION IN CARE

- Inconsistent with care or cycling in and out of care:
  - Female
  - Belong to a minority race or ethnicity
  - Lower socioeconomic status
  - Lack health insurance
  - Newly changed insurance company
- Drug or alcohol dependence
- Untreated depression

1. HIV – Retention in Care [cited 2023 Feb 14] . Available from: https://www.cdc.gov/hiv/clinicians/treatment/care-retention.html

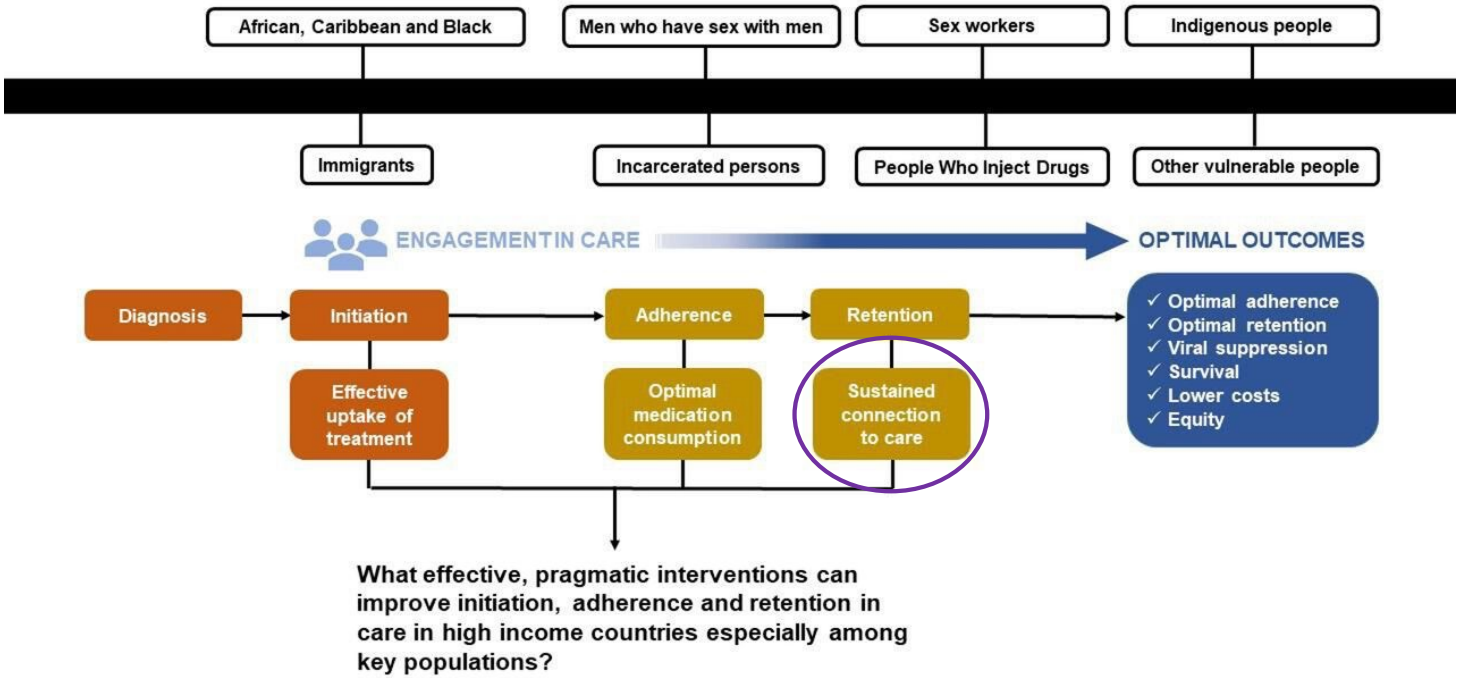
PRIORITY POPULATIONS AND DISPARITY

Higher risk of poor retention, gaps in care

- Men who have sex with men
- Racial and ethnic minorities including indigenous peoples
- Individuals who use drugs
- Those with health insurance issues
- Other socially marginalised groups (e.g. immigrants, refugees)
- Women who face systemic risk and other groups known to have challenges with engagement in care

1. Mbuagbaw L et al. Strategies to improve adherence to antiretroviral therapy and retention in care for people living with HIV in high-income countries: a protocol for an overview of systematic reviews. BMJ Open 2018;8:e022982
2. Cunningham CO et al. Factors associated with returning to HIV care after a gap in care in New York State. J Acquir Immune Defic Syndr. 2014 Aug 1;66(4):419-27.

Outline of the HIV Care Cascade



Lawrence Mbuagbaw et al. BMJ Open 2020;10:e034793

BMJ Open

CASE STUDY#1

CASE #1: SE

SE, a 29-year-old female attended treatment clinic in July 2008 having been brought in by her father. She had been in care for 2 years. He gave a history of his daughter testing positive for HIV in October 2006 while on remand at the Psychiatric Hospital. She has a h/o - active substance abuse (cocaine) & was drowsy at time of visit.- She was given a follow up to return – but did not return at slated time.
October, 2008 – Returned to clinic independently, advised of HIV status – states she was not previously aware of status
October, 2008 - In patient of the Psychiatric Hospital for detox– brought by Psychiatric Nurse

At baseline:
CD4 190 cells/mm ^{3} (30%) – July 2008
VL 18, 800 copies/ml – October 2008 (earliest available VL)
Clinically: Mild anemia, pruritic papular eruptions, intermittent diarrhea
B3 & Not on HAART
To be reviewed in 2 weeks

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CASE #1: (CONT'D)

- Did not return for the review appointment
- Defaulted for 8 months (from October 2008 to June 2009)
- On return
  - Referred for social assessment, Food Bank assistance and welfare assistance
- Counselled concerning the need for Antiretroviral Therapy (ART)
- Attended next 3 scheduled visits
- Discussion re ART continued
- Decision to have her attend with a relative before starting ART

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CASE # 1: (CONTD.)

- SE and her 2 children (aged 9 and 4) moved in with her mother
- SE reported no cocaine use in the 3/52 prior and felt she could "manage her addiction"
- Open to the idea of non-residential rehab
- Started on ART, June 23, 2009 (TDF/FTC/NVP) and referred to MSW to organize entry to rehab
- SE maintained 100% adherence for 2/12
- Then defaulted after 3/12, for - > 2 years…

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CONSIDER…

- Information from her history & examination should include
  - Contact tracing
  - Her level of competence/ability to adhere
  - Psychiatric History – severity/control
  - Family Support

- HIV management – ART – Oral vs Long acting Injectables, feasibility?

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REASONS FOR POOR RETENTION AND ADHERENCE

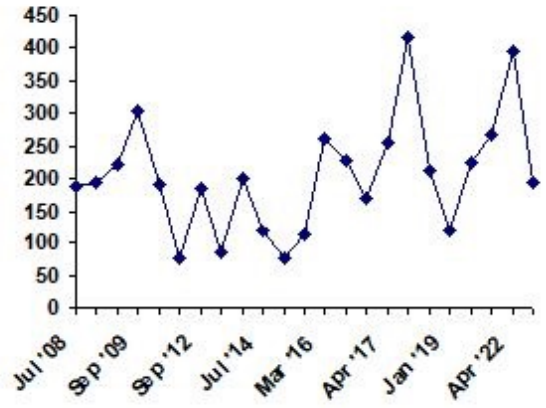
Crack cocaine use

Lack of support (when she lived with her mother and attended visits with relative, adherence and retention improved)

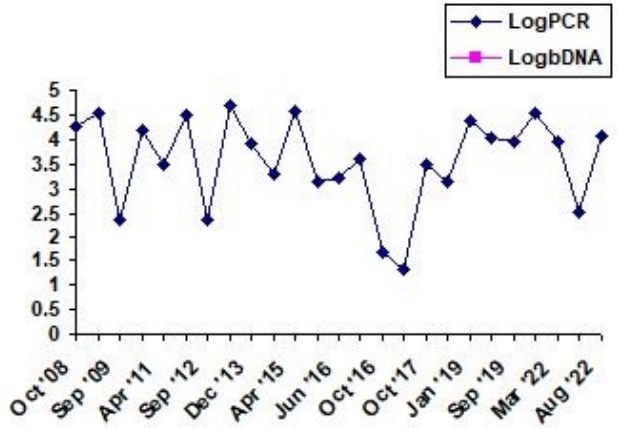
Forgetting (medication and appointments)

SUMMARY OF RESULTS, 2008 TO 2022

CD4



Viral load



REGIMENS USED

- 2009 - TDF/FTC/NVP (initial response)
- 2012 - TDF/FTC/ATV/r (initial response with pill distribution support)
- 2016 - ABC/3TC/ATVr (initial response)
- 2022 – ABC/3TC/ATV/r (response with pill distribution support)

- Resistance test requested – results not available

CURRENT STATUS

- On ABC/3TC/ATVr currently
- Adherence maintained when supports are in place (mother, residential drug rehabilitation)
- Pill boxes distributions being utilized
- VL 326 copies/ml (12/04/2022) and 12,100 copies/ml (17/08/2022)
- Last clinic attendance November 2022

STRATEGIES EMPLOYED

- Strengthening of support mechanisms (family support, external social support)
- Drug Rehabilitation
  - Non-residential and residential care
- Use of weekly pill distributions
- Resistance testing and change of regimen

CASE STUDY #2

CASE #2: J.H

J.H. 47-year-old male was diagnosed HIV positive in 2001 in late-stage disease.

Earliest available results

CD4 – 40 cells/mm^3 (April 2001); VL 190,000 copies/ml (March 2002)

Admitted to hospital March 2002 with seizures

Main diagnoses - Cerebral Toxoplasmosis and AIDS Dementia Complex

ART commenced April 2002 (AZT/3TC/EFV)

Client's ART was administered by his family (son, daughter and wife)

100% adherence reported by son

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CASE #2: CONT'D

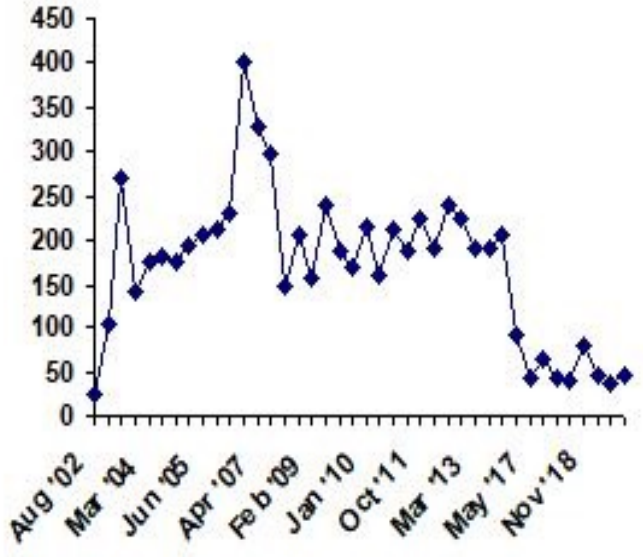
- Assisted by family with meds and attending appts
- Of note, June 04 wife died, but family support continued from his children
- Between 2003 – 2008, missed some appointments and collection of medication repeats dues to transportation issues
- Interventions:
  - Strong support from family, with meds administered by them daily
  - Decision was made to start pill boxes weekly
  - Community visits were commenced by nurse
  - Driver was asked to deliver medications to J.H. residence
- Adherence averaged 95-100% over that time period, and reflected in virologic response to ART

GAPS IN CARE

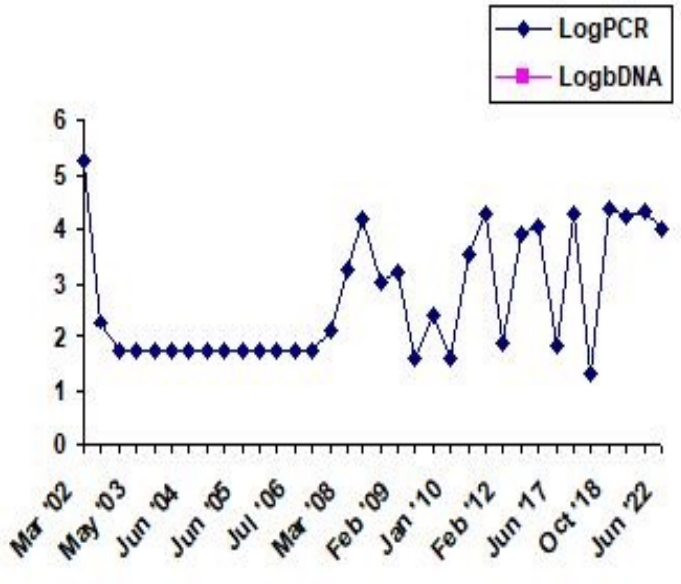
- In 2008, things began to go awry
- Main issues highlighted:
  - Intellectual deficit
  - Cognitive impairment, with increasingly poor memory
  - Need for transport from home to clinic and for delivery of medications
  - Less support from family (occasional relationship tension)
  - Alcohol abuse (refused support to decrease or stop)
  - Developed HTN, peripheral neuropathy
- Repeated episodes of defaulting, 4 months, 1 year, 18 months, 10 months, 7 months
- Additionally, h/o of a fall 2020, injury to lower back, resulting in further reduced mobility (previously used a walker at clinic appointments, now progressed to wheelchair)

SUMMARY OF RESULTS, 2002 - 2022

CD4



Viral load



REGIMENS USED

- AZT/3TC/EFV – 1st Line (April 2002)
- TDF/FTC/LPV/r – 2nd Line (March 2009)
- TDF/FTC/LPV/r/ABC
- TDF/FTC/ATV/r/ABC
- TDF/FTC/DTG (current) – Simplification

AT PRESENT

- Recently returned to care after a 7/12 gap
- Adherence sub-optimal
- Daughter "helps with medications" – less supportive compared to before
- CD 4: 47 cells/mm3; VL 9, 780 copies/ml
- Physical and mental decline noted
- Support reinforced with respect to:
  - Transportation to clinic
  - Establishing the main point of contact within the family
  - Re-engaging with social worker
  - Assistance with medication refills and collection or transport when clinic vehicle is functional

DISCUSSION

1. What are the support needs of this patient? Mentally/Physically/ socially?
2. How much intervention is acceptable in a limited resources situation?
3. Are resources being wasted?
4. How do you rationalize your management? E.g. Intensity/Cost
5. Compared to the previous case study where were the successes gained?

STRATEGIES EMPLOYED IN THIS CASE

- Involvement of family, strengthening of family support
- Home visits by community nurse and medical social worker to monitor and support adherence, discuss any issues with family
- Providing transport for client to and from clinic
- Delivery of medications
- Use of pillboxes (one week supply at a time)
- Referral to MSW (social assessment and support, substance use counselling)

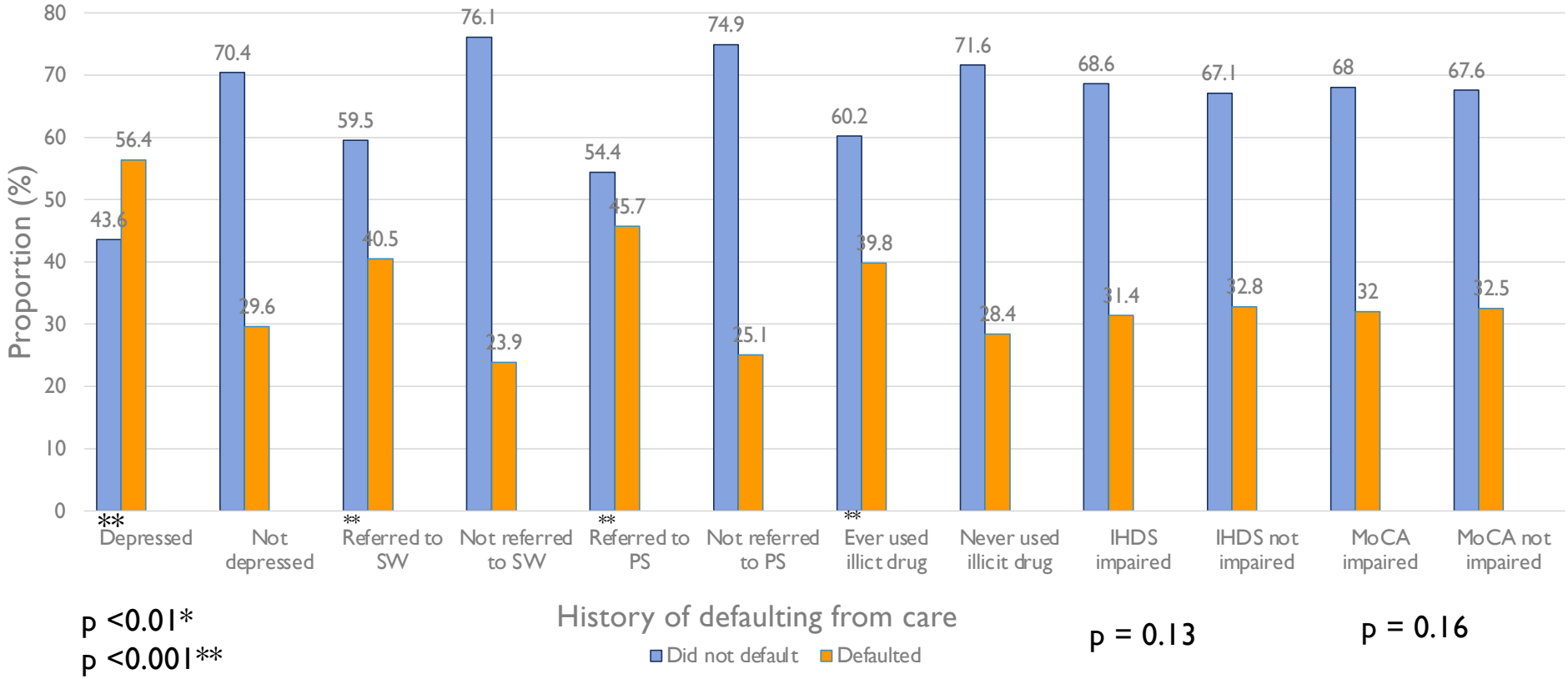
RETENTION IN CARE – HIV PROGRAM BARBADOS

- First attendance:
  - Within 1 month (46.9 %)
  - Within 6 months (34.2%)
  - 6 months – 2 years (15%)
  - > 2 years (3.8%)

- Never defaulted, 67.9% ; Ever defaulted, 32.1%
  - Once 14.6%
  - Multiple occasions 17.5%
- Overall rate of default: 17% (2022)

1. Babb D. (2022) An Assessment of Adherence to Antiretroviral Therapy and Retention in Care among persons living with HIV in Barbados. Dissertation.
2. HIV/STI Programme, Routine Surveillance Data (preliminary), 2022

Relationship between default and specific factors



p <0.01*
p <0.001**

p = 0.13

p = 0.16

Babb D. (2022) An Assessment of Adherence to Antiretroviral Therapy and Retention in Care among persons living with HIV in Barbados. Dissertation.

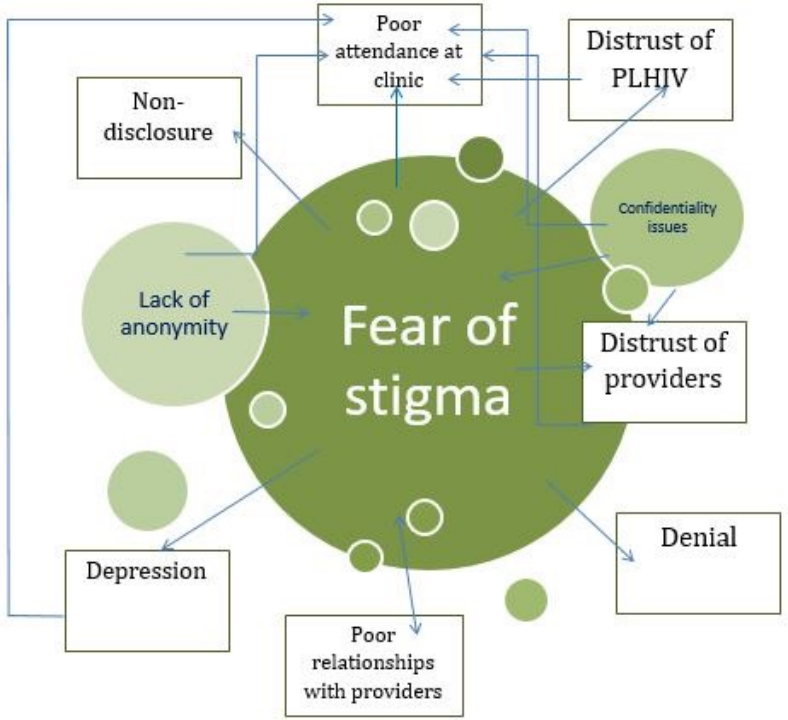
FACTORS ASSOCIATED WITH DEFAULT (NON-RETENTION) ON LOGISTIC REGRESSION

Default	Odds Ratio	Std. Err.	Z	P >|z|	(95% Conf. Int.)
Depression	2.47	0.73	3.06	0.002	1.39 – 4.40
Referral to a social worker	2.20	0.42	4.16	0.000	1.52 – 3.18
Age	1.03	0.01	4.16	0.000	1.02 - 1.04
_cons	0.164	0.07	-4.23	0.000	0.071 - 0.378

No. of observations = 582; LR chi sq = 48.6; Prob > chi2 = 0.000; Pseudo R2 = 0.0665

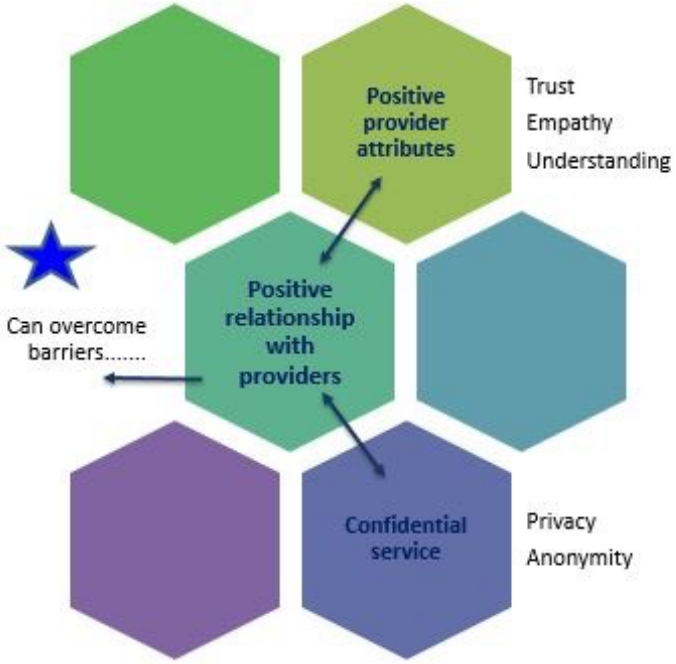
Babb D. (2022) An Assessment of Adherence to Antiretroviral Therapy and Retention in Care among persons living with HIV in Barbados. Dissertation.

BARRIERS TO RETENTION IN CARE ARE INTERCONNECTED



1. Babb D. (2022) An Assessment of Adherence to Antiretroviral Therapy and Retention in Care among persons living with HIV in Barbados. Dissertation.

FACILITATORS OF RETENTION IN CARE



Relationship between the health care facilitators of retention in care

1. Babb D. (2022) An Assessment of Adherence to Antiretroviral Therapy and Retention in Care among persons living with HIV in Barbados. Dissertation.

ADDITIONAL APPROACHES FOR SUPPORTING CLIENTS RETURN TO HIV CARE

- Locating those who have defaulted – calls, text messages, house visits
- Addressing the specific issue where possible
  - Active psychiatric illness – referral and treatment
  - Substance abuse – referral to rehab programs
  - Social issues – MSW assessment and appropriate support (welfare, housing, food assistance etc.)
  - Addressing the environment and convenience of clinic services to reduce stigma associated with accessing the service
- Differentiated care programs e.g. after hours clinics (evenings and weekends)
- Ongoing efforts e.g. calls and contact when an appointment is missed
- Individual and collective social and psychological support must be maintained

GENERAL STRATEGIES TO SUPPORT RETENTION IN HIV CARE

- Assist patients in modifying their behaviour
- Gain the patient's trust
- Have good communication between the patients and HCWs to collaborate in the decision-making
  - Show empathy
  - Address health care system constraints
  - Incorporate psychosocial, sociocultural, gender, age, and chronic illness factors
  - Have an interest in the barriers that patients have
  - Mutually agree on a plan
  - Reinforce positive behaviours

Talking to your patients (2019) Centers for Disease Control and Prevention. Available at: https://www.cdc.gov/hiv/clinicians/treatment/patient-provider.html (Accessed: February 16, 2023).

GENERAL STRATEGIES TO SUPPORT RETENTION IN HIV CARE

- Enable access to services and resources as needed
- Use of mobile health (mHealth) applications to provide support with engagement in care
- Include use of video social media platform to help meet patients' needs
- Use of real time patient tracking systems to determine non- compliance/ non retention
- Discuss consent to intervention and observe HIPAA and privacy laws

1. Cohn WF et al. An Implementation Strategy to Expand Mobile Health Use in HIV Care Settings: Rapid Evaluation Study Using the Consolidated Framework for Implementation Research. JMIR Mhealth Uhealth. 2021 Apr 28;9(4)
2. Fonner, V.A. et al. (2021) Patient-provider text messaging and video calling among case-managed patients living with HIV: Formative acceptability and Feasibility Study, JMIR Formative Research. Canada.

GENERAL STRATEGIES TO SUPPORT RETENTION IN HIV CARE

- Set up and maintain a simple standardized monitoring system
  - Track the number of patients in care (every month, quarter, etc.)
- Reliably ascertain true treatment outcomes
  - Death, stopped treatments, loss to follow-up, transferred patients
- Ensure uninterrupted ART drug supplies
- Use simple non-toxic, and economical ART regimens
- Decentralize ART clinics and reduce the number of visits for stable patients
- Reduce indirect patient costs (e.g. socioeconomic interventions)
  - Provide transportation, social support, home-based care, welfare support, food, etc.
- Strengthen ART links within and between health services and the community
  - Community links e.g. nurses, family members, etc.
- Use Innovative Interventions

Harries, A.D. et al. (2010) Strategies to improve patient retention on antiretroviral therapy in sub-Saharan africa, Tropical medicine & international health : TM & IH. U.S. National Library of Medicine.

LESSONS LEARNED

- Non-retention is a complex issue
  - There are no "easy" solutions for complex issues
- Reasons for poor retention evolve over time as circumstances/stages of life change
- Efforts to return persons to care and retain them in care should:
  - Be individually tailored to the clients specific need
  - Utilise multiple approaches
- The process is often highly labour intensive

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- Complete the form and submit your request within 24- hours of this presentation.
- Certificates will be issued within 30 days.

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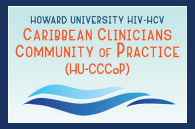
QUESTION & ANSWER SESSION



Thank You

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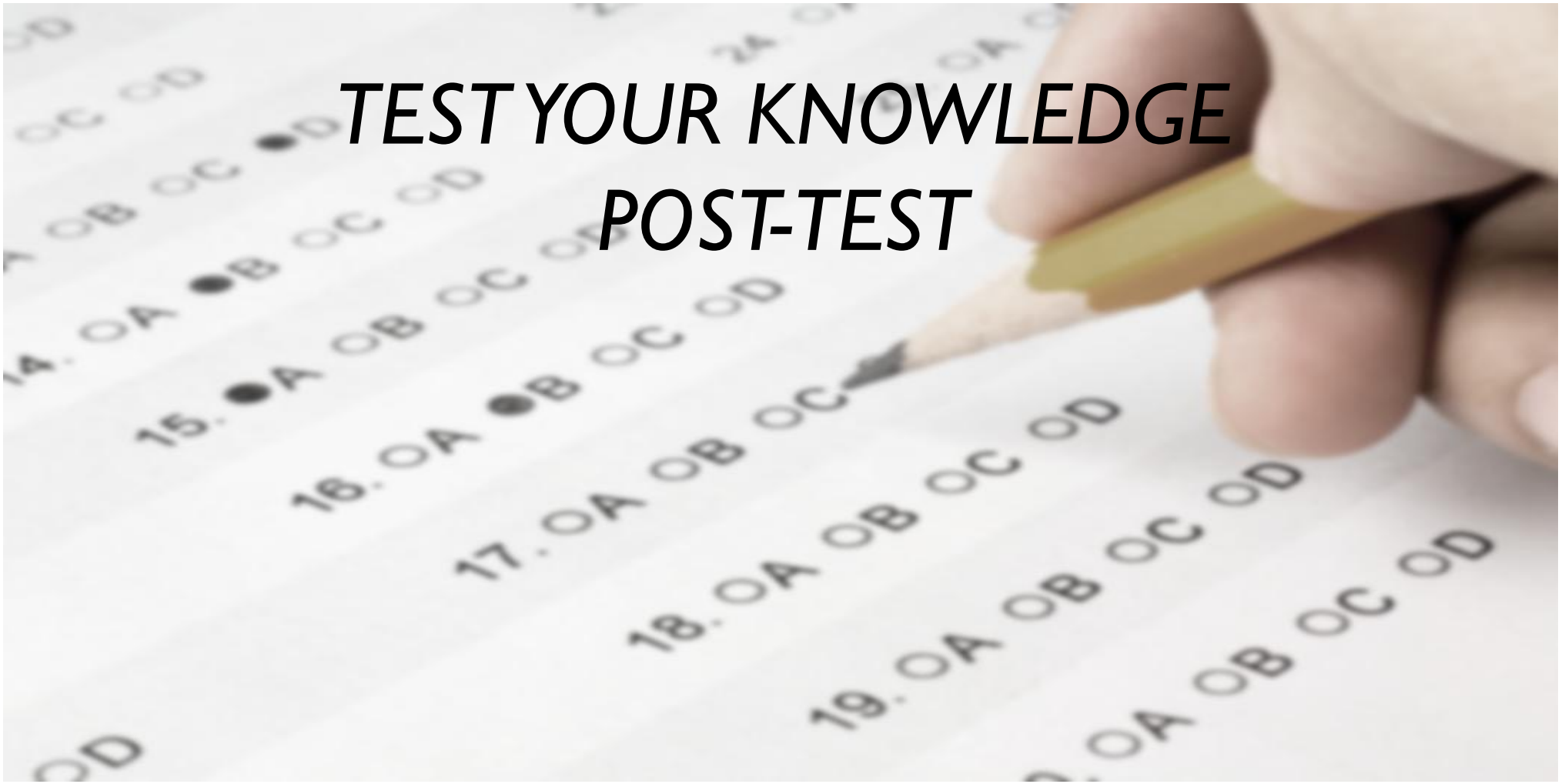
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POST-TEST

Test Your Knowledge
Question #5

Which of the following statement is <u>True? Choose the best response</u>

A. Retention in HIV care is not related to a client's continuous engagement with the health services or in medical care

B. Retention in HIV is defined as a patient who misses less than 3 clinic visits per year

C. Retention in HIV care is challenging to define and measure as there is no single accepted universal definition

D. A and B

Test Your Knowledge
Question #6

What factors may predict altered patient attendance for regular ongoing care in the Caribbean?

A. Female gender

B. Higher socioeconomic status

C. Belonging to a minority race or ethnicity

D. A lack of health insurance

Test Your Knowledge
Question #7

What are the most common reasons for non-retention in HIV care? Choose the best response.

A. Active substance abuse

B. Advanced age

C. Lack of social support

D. Active psychiatric illness

Test Your Knowledge
Question #8

Strategies to support retention of clients in HIV care includes which of the following? Choose the best response.

A. Reinforcing positive behaviours to adopt a positive relationship between clients and providers

B. Making decisions without the clients as they are not compliant

C. Stopping benefits for clients to force them to return to clinic to receive benefits

D. Insisting on patient attendance at clinic to continue ongoing treatment

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