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Analyses of Human Immunodeficiency Virus (HIV) Acquired Immune Deficiency Syndrome (AIDS) and Sexually Transmitted Infection (STI) in Houston Harris county, Texas

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Abstract

The primary focus of this research study was analyze secondary datasets statistics obtained from Texas Department of Human State Health Services between 2020 and 2021 to investigate and explore how, where, and why HIV/AIDS and TSI increases in Houston Harris County, Texas as compared to other major cities and counties in the state of Texas. This research study used Conspiracy Theory Framework and Denialism Theory as lens of analyses of the collected datasets statistics. Only the secondary datasets statistics were available and obtained from Texas Department of Human State Health Services between 2020 and 2021 as datasets for analyses. The collected datasets were fed into SPSS Version 27 which was used as a software tool in analyzing the collected datasets. The research study found in a One-Sample Test Sig. (2 tailed) test of .000, Mean Difference of 4.246, and 95% Confidence Interval of the Difference lower level of 4.17 and upper level of 4.34. This found some profound significant differences between the independent and dependent variables or 100% correlations between the variables. The study strongly suggested and recommended that all public and private healthcare practitioners should read, review, and implement the results and findings of this critically significant research study, as to possibly bring some "POSITIVE SOCIAL CHANGES" to all in the cities in state of Texas, in the US, and possibly beyond.

Keywords: AIDS, HIV, STI, Conspiracy, Denialism, Fantasies, Fallacies, Belongings, Political Interests, Social Media, Acceptances, Popularities

Introduction

Over the years Human Immunodeficiency Virus (HIV), Acquired Immune Deficiency Syndrome (AIDS), and Sexually Transmitted Infections (STI) in Houston Harris Texas have been on the decrease year after year. However, the most recent statistics have shown that HIV/AIDS and other STI have been on the unusual increase in Houston Harris County, Texas as compared to other major cities in the state of Texas even perhaps in the United States of America (USA) across the board. Unfortunately, many have argued the some assumptions, preconceptions, and denialism conceptual theory may have played some unusual roles on the increases of HIV/AIDS and TSI in Houston Harris County, Texas in the past few years (see Institute of Medicine (US) Committee for the Oversight of AIDS Activities, 1988; "The Evidence that HIV Causes AIDS", 2009; Cohen, 2014; "Denying science", 2006; Merlan, 2024 for more details). The primary focus of this research study was analyze secondary datasets statistics obtained from Texas Department of Human State Health Services between 2020 and 2021 to investigate and explore how, where, and why HIV/AIDS and TSI increased in Houston Harris County, Texas as compared to other major cities and counties in the state of Texas.

Background and Literature Reviewed

Evidence has shown that Human Immunodeficiency Virus (HIV) or Acquired Immune Deficiency Syndrome (AIDS) and Sexually Transmitted Infection (STI) are no longer in existence due to many factors especially among the young people on Houston and others in the state of Texas. Many argued that new medications has made the visibilities of HIV/AIDS/STI due the new medications that can make them invisible during testing; yet, the medications' producers have warmed repeatedly that they do not guarantee the transmissions of HIV/AIDS/STI from one person to another due to their invisibilities. These perceptions and preconceptions fell under the "Denialism Theory" as well as the "Denying Science" as pinpointed, stipulated, and stressed that this is not true (see Institute of Medicine (US) Committee for the Oversight of AIDS Activities, 1988; "The Evidence that HIV Causes AIDS", 2009; Cohen, 2014; "Denying science", 2006; Merlan, 2024 for more details as aligned above).

Besides the above scientific consensus overwhelming proven research studies' evidences that HIV causes AIDS many argued that "that HIV/AIDS denialist claims are pseudoscience based on conspiracy theories, faulty reasoning, cherry picking, and misrepresentation of mainly outdated scientific data" (see Denying Science, p. 369; Smith & Merlan, August 7, 2024 for more details). "Conspiracy theory is an explanation for an event or situation that assets the existence of a conspiracy, when other explanations are more probable" (Google Scholar, 2025 for more details). Generally, conspiracy theory has a "NEGATIVE" connotation which appeals to those with theories based in prejudice, emotional conviction, or with insufficient evidence to back it up. In fact, conspiracy theory always somehow comes from those who do not believe in sciences; but they believed in unproven, invalid, unsound or unrealistic "FANTASIES" and "FALLACIES" arguments jut to prove their points. For example, many have argued that we now have some "HIV/AIDS/STI" mediations if taken properly such as 4 to 6 or 8 times a year; ones' HIV/AIDS/STI will eventually disappear in individualized "Blood Works" will not detect these items. As such, majority of conspiracy believers careless use this unproven assumption as a yardstick to get involve in unprotected reckless sexual behaviors.

As history has it in light of the fact that denialism has no proven scientific investigated of explore proven evidence-based facts it has a significant political implications in many countries. For example, in South Africa during the presidency of Thabo Mbeki the Scientists and physicians raised alarm of the human cost of HIV/AIDS denialism, which discourages AIDS/HIV-positive people from using proven therapeutic treatments (see "The Evidence that HIV Causes AIDS". National Institute of Allergy and Infectious Disease, 2009; Steinberg, 2009; Watson, 2006; Boseley, 2005; "The Durban Declaration", 2000; Chigwedere & Seage, 2008 for more details). During the same time as well, HIV/AIDS infected men started having unprotected sex engagements with underage young girls especially virgins, due to unproven assumptions that it could cure the infections of HIV/AIDS permanently. Unfortunately, due to these reckless behaviors, researches showed that almost 350 thousands people died of AIDS related complications in South Africa; along with 171,000 other HIV infections and 35,000 infant HIV infections, to the South African government's former embrace of HIV/AIDS denialism theory. However, such old unproven assumptions are currently replaced with misinformation, disinformation, lies, fake news, money, social media populations, social media popularities, profits, and political beneficial interests that AIDS/HIV/STI are no longer considered as a chronic disease in the US due to advanced newly produced pharmaceutical medications which could cure every aspect of these chronic diseases in the US permanently.

Investigation and Exploration of the Assumptions

In a Research Methodology course which dealt with and taught senior 4000 levels' students that covered 3-Way Researches such as Quantitative, Qualitative and Mixed-Methods Approaches in PHLT-4313-P01-2520-21689 course the assumptions were tested. The students were given the opportunity to select from any School of Public Allied Health (SPAHE) related Public Health or Health topics during their "Final Project" assignment. The students were divided into 3 groups such as Group A1, Group B2, and Group C3; the students were instructed to select a topic and to send the instructor/s their selected topic for review and possible approval before working on the research topic/s. Also, the students should select a group leader who will communicate on their behalf with the instructor/s; above all, only one completed research study should be submitted and presented during the "Final Project" assignment in Face-To-Face (FTF) format in class or in a recorded videoed Power Point Presentations (PPP) format in 100% online classes. The below is the results and findings of "Group A1" in their "Final Project" quantitative research study in spring 2025 semester.

Results and Findings

Rising HIV Rates in Houston Texas

Overview of HIV

HIV rates in Houston and Harris County are rising. In 2022, there were 1,277 new HIV diagnoses in Houston, marking an 8% increase from the previous year. The rate of new HIV and stage 3 HIV diagnoses rose from 24.9 to 26.4 per 100,000 residents.

Purpose/Rationale

High HIV Prevalence and New Diagnosis

Over 28,000 individuals were living with HIV in the city, with over 1,000 new diagnoses in a year. An estimated 6,825 individuals were living with HIV but remained undiagnosed.

Addressing Stigma and Social Determinants

Stigma, discrimination, and socioeconomic challenges:

- Example: poverty, unstable housing, and limited healthcare access
- These factors hinder prevention, testing, and treatment efforts, among marginalized group

Disproportionate Impact on Communities of Color

The HIV epidemic in Houston affects Black and Latino communities. Black residents constitute about 22% of the city's population but account for approximately 50% of HIV cases. Latinos represent 29% of cases, surpassing their national average of 24.7% in the US.

HIV Statistics in Houston Texas

Total People Living with HIV (PLWH): Approximately 34,914 adults aged 13 and older.

Black/African Americans: Represented 37% of new HIV diagnoses in 2021, despite comprising a smaller percentage of the population.

Hispanic/Latina/Latinos Individuals: Accounted for 46% of new diagnoses in 2021.

New HIV Diagnoses in 2023: Data for 2023 are provisional; however, in 2021, there were 1,277 new diagnoses, indicating a 24% increase from 2020 (See Elton John AIDS Foundation, 2024; McGovern Medical School, n.d.; Houston Health Department, 2024 for more details)

Who Is Affected?

HIV can affect anyone, but certain populations are affected due to social, behavioral, and economic factors

Age: 25-34 Account for more than half of new HIV diagnosis
Older Adults are increasingly living with HIV infections.

Gender and Sexual Orientation: Men who have sex with men, Transgender women, heterosexual women.

By Risk Factors: Injection drug users, people with multiple sex partners and inconsistent condom use during sexual activities.

Hotspots in Houston

- 77004: Includes Third Ward and parts of Midtown; historically impacted Black communities
- 77021: Southeast Houston; appears in syphilis list as well; underserved area
- 77033: South Houston; associated with high poverty and limited access to care
- 77051: Also appears under gonorrhea ZIP codes; high-risk zone
- 77026: Northeast of Downtown; linked to high HIV prevalence in Black communities (See About. Southern AIDS Coalition, 2025; KPRC-TV Chanel 2, 2025; Houston. HIV Services & Programs n.d.; Taylor & Muñoz, 2025 for more details)

Recent Trends

- In 2022 there were 1,277 new HIV cases which had an 8 percent increase from 2021
- Hispanics account for 46 percent while African Americans accounted for 37 percent
- Ages 25-34 were among the highest group
- Males contribute to 81 percent of new HIV cases in 2022
- Male to Male contact contribute to 72 percent of new cases

- By end of 2022, there were 28,246 individuals with HIV

Social Determinants of Health

- Economic Stability
 - ☐ Poverty/ Unemployment
- Education access
 - ☐ Health literacy/ school dropout rates
- Healthcare access
 - ☐ Lack of insurance/ provider stigma
- Social and Community Stigmas
 - ☐ Stigma and Discrimination
 - ☐ Intimate Partner Violence

Barriers to Testing and Treatment

- Financial Barriers, Stigma and Discrimination, Lack of Health literacy/education, Limited access to care, Fragmented Services, and Youth and Minor Barriers

Lack of Education or Awareness

- Misunderstanding of HIV transmission, Negative stigma and silence around HIV, Low Testing Rates, Limited Awareness of prevention tools, and Misinformation from social media and peers

Healthcare System Challenges

Lack of insurance, limited availability for specialized HIV care, Financial, language or cultural barriers Stigmatization and discrimination and the lack of a supportive community

Local Health Department Efforts

The Houston Health Department launched an “I Am Life” campaign to educate audiences about preventing HIV through PrEP and TasP to reduce transmission of HIV.

The Houston HIV Prevention Community Planning Group (HHPCPG) is to create a plan to address the HIV prevention needs of Houston.

HHD encourages people to make use of the National Black HIV/AIDS awareness day (February 7th) to get tested and become educated.

Nonprofit and Community Organization Involvement

Nonprofits and community organizations like Allies in Hope provide services like:

Free or low-cost HIV testing in areas where access is limited

Targeted education campaigns tailored to higher-risk populations

Push for policy change for more funding and better healthcare access

Offering support services like mental health support and housing assistance

Prevention Strategies

PrEP (pre-exposure prophylaxis): a daily pill to reduce the risk by 99%.

PEP (post-exposure prophylaxis): 28-day course of medication that starts 72 hrs after exposure.

TasP (treatment as prevention): medication to reach an undetectable viral load, making it unable to spread HIV.

Condom distribution and safe sex education: condoms are a great barrier to reducing the risk, and education helps bring awareness to the rising rates.

Regular HIV testing: HIV can be asymptomatic in some individuals, which increases the risk of transmission (See Huynh, 2021; Hope, 2024; Legacy Community Health, 2023; UNAIDS n.d. for more details).

Awareness Campaigns

NATIONAL

- National Black HIV/AIDS Awareness Day, February 7
- Established in 1999, this campaign seeks to shed light on the disproportionate effect of HIV/AIDS on the black population in America.

GLOBAL

- UNAIDS World AIDS Day, December 1
- Founded in 1988, annually this day is celebrated coining a new slogan each year. “Take the rights path” being the most recent slogan in 2024, focused on human rights as a means to end the spread of AIDS.

REGIONAL

- Southern AIDS Coalition, Founded in 2001
- Fighting to combat the rise of HIV and AIDS, this organization advocates for southerners and strives to “change the course of HIV in the south.”

LOCAL

- #Get2Zero Campaign by Legacy Community Health

Since 2016, this local agency has introduced a plan to limit the spread of HIV and treat those living with HIV and AIDS in Houston, Texas (See Home, n.d.; About Southern AIDS Coalition, 2025; Houston Health Department, 2024; 2024 for more details).

What is Working and Not Working?

- Prioritizing treatment for HIV positive individuals with antiretroviral (ART) medication
 - “Undetectable=Untransmutable”
 - According to the CDC (2024), Studies show “100% efficacy in preventing HIV transmission if ART is taken as prescribed and an undetectable viral load is achieved.”
- Promoting the use of PrEP for populations disproportionately affected by HIV/ AIDS
- “The risk of HIV is up to 92% lower for people who take oral PrEP consistently, “ (CDC, 2024)
- Distributing PEP to individuals who have potentially been exposed to HIV
- PEP can reduce the risk of getting HIV by more than 80%

Ongoing Challenges

- People are continuing to spread the virus because they are unaware of their status.
- Eliminating the stigma surrounding this disease, so people can do their part in stopping the spread.

- The opioid crisis contributing to the rising number in cases due to shared needles
- Lack of access to proper and regular healthcare can stop people from getting treated or receiving preventative care

Voices from the Community

- Black Ladies in Public Health-The Black Girls Spring for R&R initiative addresses disparities in HIV specifically for black women.
 - Uses a framework to destigmatize HIV and turn risk to reasons
- The T.R.U.T.H. Project is a Houston based, non-profit organization that promotes mental, emotional, and sexual health for LGBTQ people of color through social arts
 - Produced an award winning short film featuring real people living with HIV

Policy Recommendations

- Expand PrEP Access: Increase funding and availability in pharmacies and local clinics, especially in underserved communities.
- Support Harm Reduction Programs: Potentially legalize and fund syringe exchange and safe injection programs to reduce HIV transmission among people who inject drugs. Distribute clean syringes and overdose prevention kits.
- Improve HIV Testing and Early Diagnosis: Implement routine opt-out HIV testing in emergency rooms and primary care. Use mobile clinics and community partnerships for mental health resources and to reach those with no transportation, high-risk, and stigmatized groups.

Address Structural Inequities and Stigma: Provide Anti-Stigma training to healthcare providers and anti-discrimination programs. Launch programs and campaigns that promote HIV testing, treatment, and prevention.

What Schools/Universities to Do

- **Campus engagement:** The Health Department and the School of Public and Allied Health could host walks, campaign events, fundraisers, etc., in support of safe sex and HIV prevention.
- **Outreach:** Campus groups/organizations could partner with programs in Houston. Allies in Hope is a program that Prairie View A&M University is already in partnership with that promotes HIV and STI education and prevention, testing, PrEP, and EHE as well as HIV treatment in Greater Houston.

Community Engagement

National Black HIV/AIDS Awareness Day

Legacy Community Health Organization February 7th

EHE Houston:

Houston Health Department

A framework with key strategies, innovative activities, and measurable indicators to track progress toward ending the HIV epidemic by 2030 is significant in bringing an end to HIV among others. Its primary goal is to meet the HIV prevention needs of the Greater Houston Area while addressing persistent challenges in access to and delivery of HIV services.

What can you do?

- Use Condoms Regularly
- Get on **PrEP** if at risk or even as a preventative measure
- Limit your sexual partners
- Treat STIs correctly
- Effectively Communicate
- Avoid Sharing Needling and Injection Equipment
- Get Tested Regularly

Summation

Ending the AIDS/HIV epidemic in Houston requires a united effort through prevention, early diagnosis, access to care, and addressing social determinants of health. With evidence-based strategies, community engagement, and strong policy support, Houston can become a model city in reducing new AIDS/HIV infections and ensuring health equity for all.

Verifications of the Reliability Credibility and Validities of Group A1 Results and Findings

In light of Group A1 Results and Findings the Open Question becomes is it true that Houston Harris County, Texas accounts for the worst AIDS/HIV/STI infections in the state of Texas even possibly in the US? That was the final section of this critical, complex, and complicated quantitative research study final verification analysis of the Group A1 results and findings.

Research Design

This research study selected the quantitative research methodology as lens of data analyses.

Open Research Question (RQ-1)

RQ-1: Is it true that Houston Harris County, Texas accounts for the worst AIDS/HIV/STI infections in the state of Texas US even possibly in the US?

As to comprehensively answer this **Open Research Question 1 RQ-1**, two frameworks were used as our lens of analyses.

Denialism Conceptual Framework

Besides the above scientific consensus overwhelming proven research studies' evidences that HIV causes AIDS many argued that "that HIV/AIDS denialist claims are pseudoscience based on **"Denialism Conceptual Framework"**, faulty reasoning, cherry picking, and misrepresentation of mainly outdated scientific data" by denying the facts instead of accepting the historic evidence-based scientific evidences (see pp. 1-2 for more details).

Conspiracy Theory Framework

Besides the above scientific consensus overwhelming proven research studies' evidences that HIV causes AIDS many argued that "that HIV/AIDS denialist claims are pseudoscience based on **"Conspiracy Theory Framework"**, faulty reasoning, cherry picking, and misrepresentation of mainly outdated scientific data" by denying the facts instead of accepting the historic evidence-based scientific evidences (see pp. 1-2 for more details).

Data Collections and Software

Due to limited available datasets during the peak of Covid-19 pandemics between 2019, 2020, 2021, and 2022, and the transitional stages of Center for Disease Control and Prevention (CDC), only secondary datasets statistics were available and obtained from Texas Department of Human State Health Services between 2020 and 2021 as datasets for analyses (see Texas Department of Human State Health Services (TDHSHS), 2025 for more details).

Software

The collected secondary datasets were fed into SPSS version 27 and significant or insignificant level was set at 0.05 or 95% acceptance or rejection level.

Results and Findings of the Research Study

Table 1: Frequencies Distribution

Statistics		
AIDS HIV & STI In 5 Major Counties In the State Texas in 2020 & 2021		
N	Valid	5160
	Missing	0
Mean		4.2461
Std. Error of Mean		.03749
Median		4.0900 ^a
Mode		2.00
Std. Deviation		2.69282
Variance		7.251
Skewness		.452
Std. Error of Skewness		.034
Kurtosis		-.914
Std. Error of Kurtosis		.068
Range		9.00
Minimum		1.00
Maximum		10.00
Sum		21910.00
a. Calculated from grouped data.		

Table 1: Frequencies distribution showed the mean of 4.25, median of 4.1, variance of 7.3, and a Std. Deviation of 2.7 (see Table 1 above for more details).

Table 2: Cumulative Frequencies Distribution of AIDS HIV & STI In 5 Major Counties in the State Texas in 2020 & 2021

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	AIDS/HIV/STI Diagnoses in Harris County in 2020 with a rate of 19.7	933	18.1	18.1	18.1

AIDS/HIV/STI Diagnoses in Harris County in 2021 with a rate of 24.5	1158	22.4	22.4	40.5
AIDS/HIV/STI Diagnoses in Bexar County in 2020 with a rate of 14.2	278	5.4	5.4	45.9
AIDS/HIV/STI Diagnoses in Bexar County in 2021 with a rate of 16.4	332	6.4	6.4	52.3
AIDS/HIV/STI Diagnoses in Dallas County in 2020 with a rate of 25.6	668	12.9	12.9	65.3
AIDS/HIV/STI Diagnoses in Dallas County in 2021 with a rate of 30.7	795	15.4	15.4	80.7
AIDS/HIV/STI Diagnoses in Tarrant County in 2020 with a rate of 13.5	195	3.8	3.8	84.5
AIDS/HIV/STI Diagnoses in Tarrant County in 2021 with a rate of 14.6	411	8.0	8.0	92.4
AIDS/HIV/STI Diagnoses in Travis County in 2020 with a rate of 12.7	164	3.2	3.2	95.6
AIDS/HIV/STI Diagnoses in Travis County in 2021 with a rate of 17.3	226	4.4	4.4	100.0
Total	5160	100.0	100.0	

Table 2: Showed the cumulative frequencies for Harris, County, Texas of 933 for 2020 and 1158 for 2021, Bexar County with 278 and 332 for 2020 and 2021 and Dallas County with 795 and 195 in

2020 and 2021 respectively with a 100% cumulative frequencies with no missing numbers (See Table 2 above for more details).

Figure 1: Pie Chart of AIDS HIV & STI in 5 Major Counties in the State Texas in 2020 & 2021

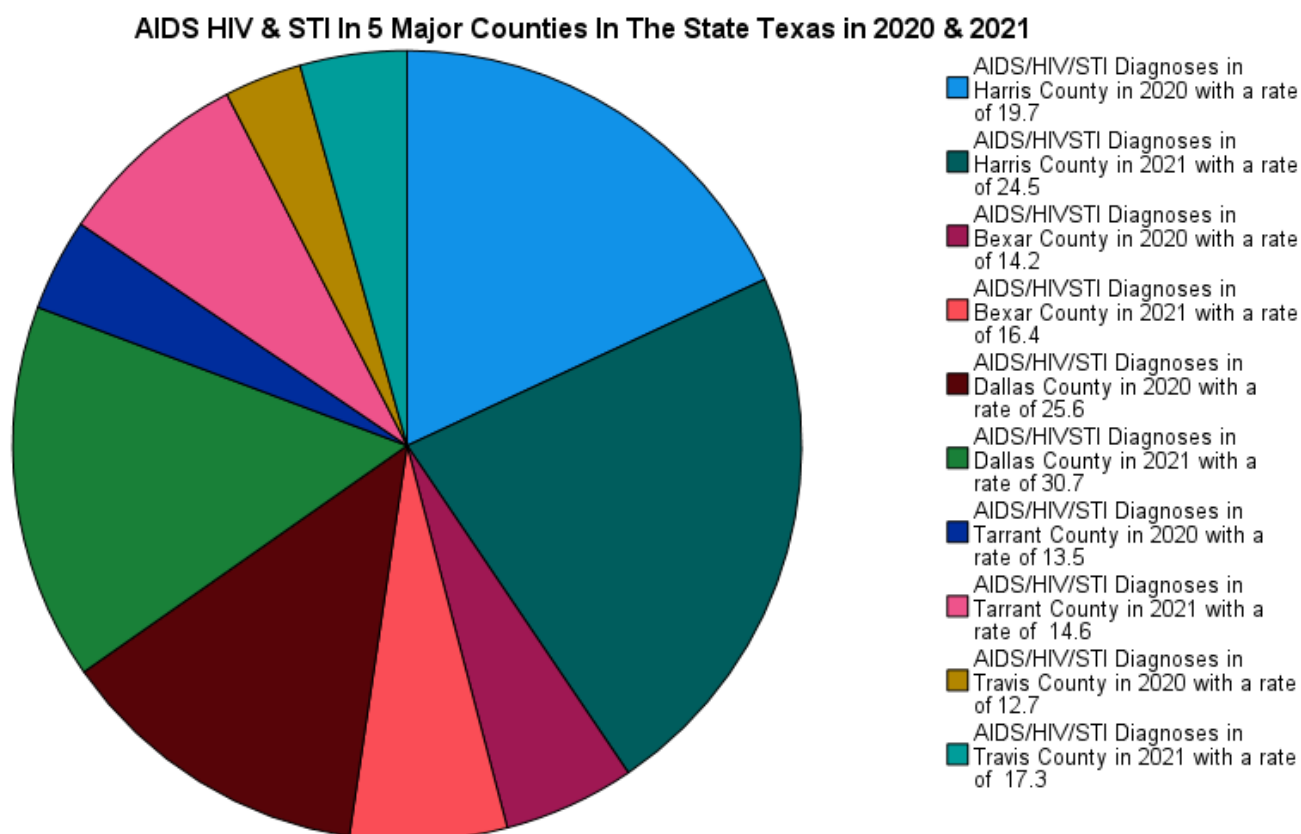
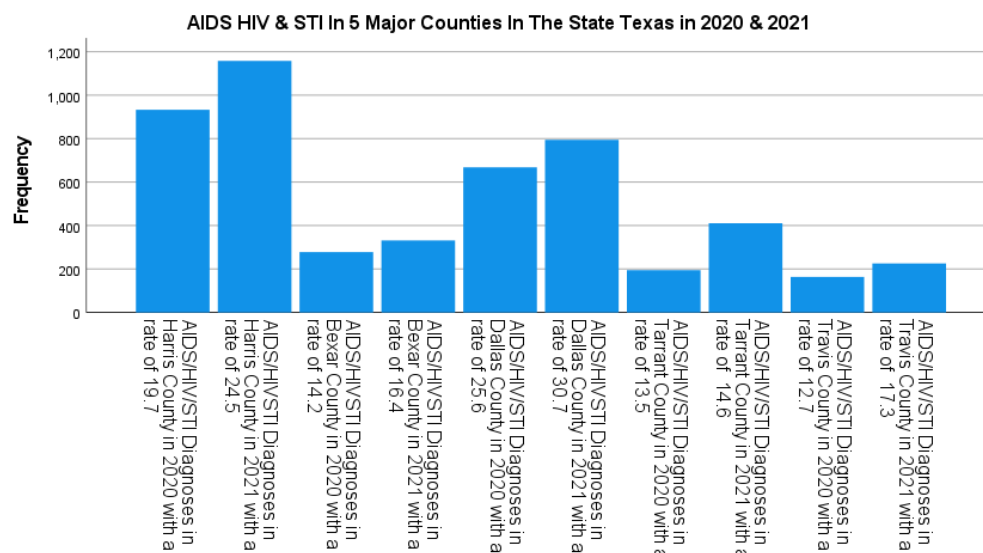


Figure 1: Pie Chart of AIDS HIV & STI in 5 Major Counties in the State Texas in 2020 & 2021 showed a color coded pie chart

data statistics of all analyzed counties (See Figure 1 above for more details).

Figure 2: Bar Chart of AIDS HIV & STI in 5 Major Counties in the State Texas in 2020 & 2021



AIDS HIV & STI in 5 Major Counties In The State Texas in 2020 & 2021

Figure 2: Bar Chart of AIDS HIV & STI in 5 Major Counties in the State Texas in 2020 & 2021 showed a bar chart of all 5 counties (See Figure 1 above for more details).

Figure 3: Histogram of AIDS HIV & STI in 5 Major Counties in the State Texas in 2020 & 2021

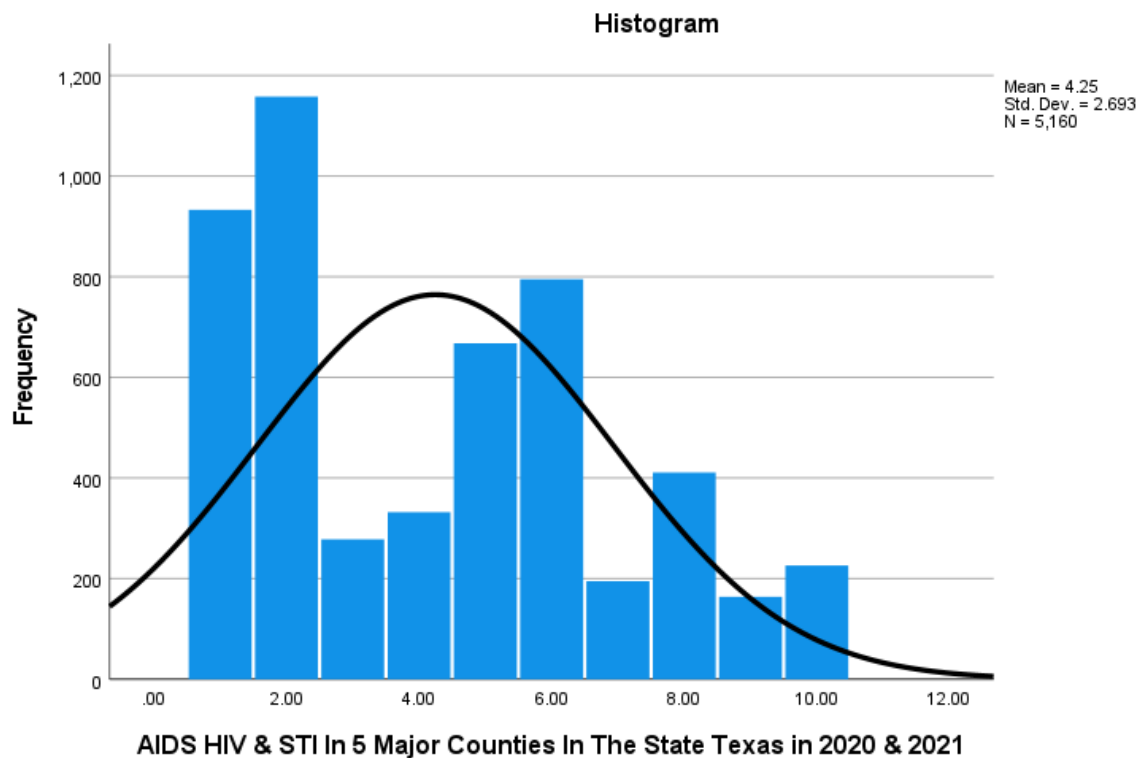


Figure 3: Histogram of AIDS HIV & STI in 5 Major Counties in the State Texas in 2020 & 2021 showed the histogram with a mean of 4.25, Standard Deviation of 2.69, and Number of 5160 (See Figure 3 above for more details).

Table 3: T-Test One-Sample Statistics

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
AIDS HIV & STI In 5 Major Counties In The State Texas in 2020 & 2021	5160	4.2461	2.69282	.03749

Table 3: T-Test One-Sample Statistics showed Numbers of 5160, Std. Deviation of 2.69 and Std. error mean of .037 (See Table 3 above for more details).

Table 4: One-Sample Test

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
AIDS HIV & STI In 5 Major Counties In The State Texas in 2020 & 2021	113.269	5159	.000	4.24612	4.1726	4.3196

Table 4: One-Sample Test showed Sig. (2 tailed) test of .000, Mean Difference of 4.246, and 95% Confidence Interval of the Difference lower level of 4.17 and upper level of 4.34. This showed profound significant differences between the independent and dependent variables or 100% correlations between these variables (See Table 4 above for more details).

Table 5: One-Sample Effect Sizes

One-Sample Test							
	Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		
					Lower	Upper	
AIDS HIV & STI In 5 Major Counties In The State Texas in 2020 & 2021	113.269	5159	.000	4.24612	4.1726		4.3196

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation.

Hedges' correction uses the sample standard deviation, plus a correction factor.

Table 5: One-Sample Effect Sizes showed Cohen's d standardizer of 2.69, Hedges' correction standardizer of 2.69, and point estimate of 1.577 and 1.577 respectively (See Table 5 above for more details).

Interpretations of the Research Study's Results and Findings

Interpretations of the results and the findings of this complex, complicated, divisive, and informative research study was critical and well-defined based on collected datasets and analyzed during the investigations and explorations of the research study. While any data selected for any research studies cannot and will not be 100% accurate, we as scientific researchers can only collect and analyze past, present, and future anticipated data that are available to us as scientific researchers. What is significant to all scientific researchers is to understand in mind that "Numbers don't lie, people do; unless if you were doctoring your research study." The research study found that of the 5160 obtained data statistic that were collected and analyzed with that highest cases in the state of Texas, between 2020 and 2021 Harris County accounted for 2091 out of 5160 or 40.5% with a 19.7% and 24.5% diagnoses rates and a collectively diagnoses rate at 21.95% respectively. The study found that of the 5160 data statistic that were analyzed with highest cases in the state of Texas, between 2020 and 2021 Bexar County accounted for 610 out of 5160 or 11.8% with a 14.2% and 16.4% diagnoses rates and collectively diagnoses rate at 15.3% respectively. The study also found that of the 5160 data statistic

that were analyzed with the highest cases in the state of Texas, between 2020 and 2021 Dallas County accounted for 1463 out of 5160 or 28% with a 25.6% and 30.7% diagnoses rates and collectively diagnoses rate at 26.9% respectively. Additionally, the study also found that of the 5160 data statistic that were analyzed in highest cases in the state of Texas, between 2020 and 2021 Tarrant County accounted for 606 out of 5160 or 11.8% with a 13.5% and 14.6% diagnoses rates with collectively diagnoses rate at 14.1% respectively. Finally, the study also found that of the 5160 data statistic that were analyzed in highest cases in the state of Texas, between 2020 and 2021 **Travis County** accounted for 390 out of 5160 or 8% with a 12.7% and 17.3% diagnoses rates a collectively diagnoses rate at 15% respectively. There is no doubt that this study demonstrated that Houston Harris County, Texas accounted for the most AIDS/HIV/STI infections in the state of Texas, possibly beyond based on the collected, reviewed, and analyzed datasets from Texas Department of Human State Health Services between 2020 and 2021 to investigate and explore how, where, and why HIV/AIDS and STI increased in Houston Harris County, Texas as compared to other major cities and counties in the state of Texas.

Above all, the study also demonstrated, pinpointed, stipulated, stressed and answered the students' Open Research Question that it is true that Houston Harris County, Texas accounts for the for that highest AIDS/HIV/STI infectious cases in state of Texas (see Figures 1-5 & Figures 1-3 for more details). In fact, of the 5160 datasets statistics collected and analyzed in this research study, the T-Test One-Sample Statistics demonstrated that there was a profound correlation between ones' sexual bad behaviors and being diagnosed with AIDS/HIV/STI in Houston Harris County, Texas at

.000 or 100% in the Sig. (2-tailed) analyses; this means there was a significant correlation between the independent and dependent variables, as such, we accepted the Alternative Hypothesis and rejected Null Hypothesis in this research study (See Tables 4 & 5 for more details).

Confirmation and Disconfirmation of Conceptual and Theoretical Frameworks

Denialism Conceptual Framework

Besides the above scientific consensus overwhelming proven research studies' evidences that HIV causes AIDS many argued that "that HIV/AIDS denialist claims are pseudoscience based on "Denialism Conceptual Framework", faulty reasoning, cherry picking, and misrepresentation of mainly outdated scientific data" by denying the facts instead of accepting the historic evidence-based scientific evidences (see p. 9 for more details).

Confirmation. The study confirmed that adhering to "Denialism Conceptual Framework" activities without any proven scientific facts and evidences leads to contacting preventable chronic diseases such as AIDS/HIV/STI among others in Houston Harris County, Texas based on the datasets statistics collected and analyzed in this research study.

Conspiracy Theory Framework

Besides the above scientific consensus overwhelming proven research studies' evidences that HIV causes AIDS many argued that "that HIV/AIDS denialist claims are pseudoscience based on "Conspiracy Theory Framework", faulty reasoning, cherry picking, and misrepresentation of mainly outdated scientific data" by denying the facts instead of accepting the historic evidence-based scientific evidences (see p. 9 for more details).

Confirmation. The study further confirmed that adhering to "Conspiracy Theory" activities without any proven scientific facts and evidences leads to contacting chronic diseases such as AIDS/HIV/STI among others in Houston Harris County, Texas based on the datasets statistics collected and analyzed in this research study.

Implications of the Study on Public Allied Health & Health Policy in General

1. This research study demonstrated that adhering to unproven non-scientific database statistics and applying these unproven behaviors can be negatively detrimental to ones' overall public health issues.
2. This research study demonstrated that accepting assumptions, presumptions, fantasies, and fallacies unproven hypotheses as reasons or yardsticks of making ones' overall health outcomes, instead of following the proven "Scientific Proven Evidence-Based Researches" is always detrimental.
3. This research study demonstrated that (All Health Professionals' Hands on the DECK) will be needed to positively address this new phenomenon and approaches of the young Combat the dynamics and components associated with positively resolving AIDS/HIV/STI overall negative implications' outcomes.
4. Furthermore, this research study demonstrated that holistic overwhelming across the board education at all levels are needed to systematically and in some cases symmetrically address these unfolding "bad behaviors" among young youths in Houston Harris County, Texas and possibly beyond, This comprehensive research study

is in alignment with the students suggestions that; Use Condoms Regularly, Get on PrEP if at risk or even as a preventative measure, Limit your sexual partners, Treat STIs correctly, Effectively Communicate, Avoid Sharing Needling and Injection Equipment, and Get Tested Regularly

5. Finally, this research study demonstrated the all healthcare practitioners at all levels such as Global, National, State, Counties, and Local levels should and must holistically participate 100% as to bring "Positive Social Changes" to all Houstonians in Harris County, Texas and possibly beyond.

Conclusion and Discussions

Essentially speaking, this critical, complex, complicated research study shed some valuable lights in various avenues; first, it demonstrated the bad humanistic behaviors always interfere with their overall negative healthcare outcomes. This means bad behaviors lead to bad outcomes; for example, majority of the confidential seconding datasets statistics collected and analyzed in this study somehow showed that they believed and adhered to some unproven perceptions, misinformation, lies, social media's interests, wanted to be noticed, political popularities interests, false information, just to mention a few. What was even fundamental about this research study was it appears that there was a 100% correlation between the size of the cities and the counties with those who were diagnosed positive for AIDS/HIV/STI; these findings and results should not be surprising. Houston Harris County, Texas is the fourth largest city in the US with almost 2.50 million plus in 2024 only behind New York, Los Angeles, and Chicago; and not to count the surrounding entities. Texas is the second largest state in the US of a population of 31.30 million people only behind the state of California with a population of with 39.43 people. Also, Dallas Tarrant County, Texas population in 2024 was 1.33 million people, San Antonio Bexar, population in 2023 was 1.50 million, and Austin Travis, Texas population in 2025 is 989,252 just a few short of 1 million people. It should be noted that while the positivity tests for AIDS/HIV/STI in these big cities and counties correlated with the sizes of the populations' cities, it is fair to argue that we may be missing some additional or subtractive numbers because of the SIGMA associated with these chronic disease such as AIDS/HIV/STI across the board.

For example, in an unverifiable datasets statistics received during the course of this critical research study, Houston Harris County Texas made the topped 10 HIV infections in the US. For example, Jacksonville, Florida, New York, New York, Houston, Texas, Baltimore, Maryland, New Orleans, Louisiana, Las Vegas, Nevada, Los Angeles, California, Atlanta, Georgia possibly one of the highest in the US like Houston, Texas. Others were Miami, Florida, and Memphis, Tennessee which TOPPED the highest HIV infections cities in the US. While this research datasets cannot be verifiable today, possibly, this give us the opportunity to expand our follow-up research studies about AIDS/HIV/STI at a national levels, hoping that better datasets will be available upon that time whenever the follow-ups researches are being investigated or explored.

Unfortunately, it should be noted that HOUSTON HARRIS COUNTY, TEXAS making the TOP 10 CITIES of the cities in the US with possibly AIDS/HIV/STI infections in the US is not an AWARD; it is an inspiration that we as HOSOTONIANS still have "MORE to DO" to be proficiently, effectively, and efficiently

battle and tackle this unfolding endless deadly epidemics. There is no doubt that these unverifiable datasets collected and reviewed between 2020, 2021, and 2025 were Mind-Bugging. For example, of the numbers collected and analyzed in this critical research study between 2020 and 2021, the current 2025 unverifiable datasets collected indicated old data were way smaller than the newer collected datasets of today's statistics. For instance, in 2025 the collective datasets was 43500 cases as compared to 5160 in 2020 and 2021 combined or 800.43% increase in possibly in half a year in 2025 singularly and this is fundamentally Mind Bugging. In summing up, this critical research study shed some valuable lights to all Houstonians, Texans, and possibly to all Americans in the US to see the systematic and symmetric unstoppable developments of AIDS/HIV/STI in the US. As such, it is strongly suggested and recommended that all Public and Private Healthcare Practitioners should read, review, analyze, and implement some of the results and findings of this critical research study, as to possibly bring some "POSITIVE SOCIAL CHANGES" to all in the cities in state of Texas especially Houstonians, to all Texans, and to all in the Americans and possibly beyond.

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Conflict of interests

This study shares no conflict of interests.

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