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Role of Yoga in Improving Quality of Life among HIV/AIDS Patients in Tripura, India

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Abstract

Acquired Immunodeficiency Syndrome (AIDS) continues to be a major global public health challenges, affecting physical, psychological, and social well-being. In Tripura, the HIV prevalence rate is around 0.37%, higher than the national average of 0.20%. Certain high-risk groups, however, exhibit significantly higher rates. Unlike other regions where HIV transmission patterns differ, Tripura's epidemic shows low levels in the general population but higher rates among specific high-risk groups. The main transmission modes include commercial sex work, heterosexual intercourse, injecting drug use, and unprotected anal sex among men who have sex with men. HIV prevalence varies across districts, with some areas matching the national average while others exceed 1%. In recent years, Tripura has implemented targeted HIV prevention strategies, leading to a decline in infection rates across both low- and high-risk groups. Antiretroviral therapy (ART) has significantly improved life expectancy, individuals living with HIV/AIDS often experience chronic stress, immune dysfunction, fatigue, and mental health issues. Yoga, a traditional mind–body practice, has emerged as an effective complementary therapy in managing these complications.

Keywords: AIDS, HIV, Tripura, Yoga, Complementary therapy

1. INTRODUCTION:

Acquired immune deficiency syndrome (AIDS), caused by the human immunodeficiency virus (HIV), includes a variety of conditions that impact the immune system. Following the initial infection, individuals may experience mild or flu-like symptoms. This is typically followed by a long asymptomatic period. As the virus progresses, it gradually weakens the immune system, making individuals more susceptible to infections like tuberculosis and rare cancers. These advanced symptoms signify AIDS, indicating a severe decline in immune function and often associated with unintended weight loss. HIV/AIDS has a profound societal impact, not only as a health issue but also as a source of discrimination. The economic consequences are also significant. There are many misconceptions about HIV/AIDS, including the false belief that it can spread through casual, non-sexual contact. The disease has also sparked controversies, particularly regarding religious views, such as the Catholic Church's opposition to the use of condoms for prevention. Since its discovery in the 1980s, HIV/AIDS has received significant international medical and political attention, along with extensive funding efforts. **[1]**

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1.1: TRANSMISSION:

HIV primarily spreads through three main routes: sexual intercourse, direct exposure to infected bodily fluids or tissues, and vertical transmission from mother to child during pregnancy, childbirth, or breastfeeding. Transmission through non-blood fluids such as saliva, tears, urine, or vomit is not a risk unless these fluids contain blood. Additionally, individuals can contract multiple strains of HIV at the same time, a condition known as HIV superinfection.

1.2: MECHANISM OF HIV/AIDS ATTACK AND ITS EFFECTS:

HIV, a retrovirus, cunningly attacks the immune system by using RNA instead of DNA. Upon infecting a cell, it hijacks the host cell's machinery to replicate itself. This process involves transcribing its RNA into the DNA of the host cell, causing the infected cell to produce both its own and the viral genes. Essentially, the cell becomes a factory for producing more virus particles.

HIV poses a major threat by attacking the immune system, which is responsible for detecting and eliminating invading pathogens. It specifically targets T-cells, a type of white blood cell that typically operates in pairs. These cells are divided into two groups based on their roles and surface molecules. Helper T cells, or CD4 cells, coordinate the immune response by signaling for help, while CD8 cells carry out the attack against infections.

HIV enters CD4 cells undetected, bypassing their defense mechanisms. It travels through the bloodstream, inserting its genetic material into these helper cells, and triggers their replication. As a result, the compromised helper cells cannot perform their crucial functions, leading to the malfunction of other immune cells. This marks the beginning of the systematic breakdown of the immune system.

1.2.1: **PHASES OF INFECTION:**

Doctors generally classify HIV infection into several stages: acute primary infection, clinical latent infection, symptomatic HIV infection, and the progression to AIDS. The main point is that HIV can now be managed as a chronic condition. With advancements in medication, people living with HIV can have an extended life expectancy and lead healthy lives. **[2]**

1.3: DIAGNOSIS:

HIV TESTING: Most individuals infected with HIV develop detectable antibodies, a process called seroconversion, within three to twelve weeks after the initial infection. To diagnose HIV before seroconversion, healthcare professionals measure HIV-RNA or p24 antigen levels. Positive results from antibody or PCR tests are confirmed either with a separate antibody test or through PCR confirmation**.[3]**

1.4: PREVENTION:

1. **SEXUAL CONTENT**: Regular use of condoms significantly decreases the risk of HIV transmission by around 80% over time. In couples where one partner is infected, consistent condom use results in fewer than 15 HIV infections per year. Research indicates that female condoms might offer similar levels of protection. Using a vaginal gel with tenofovir, a reverse transcriptase inhibitor, before sex can reduce infection rates by about 40% in African women. However, using nonoxynol-9, a spermicide, may increase transmission risk due to its irritation effects in vaginal and rectal areas.

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2. **MOTHER-TO-CHILD**: Strategies designed to prevent mother-to-child transmission of HIV have proven highly effective, reducing transmission rates by 92-99%. These methods mainly involve providing a combination of antiviral medications to pregnant women and their infants during pregnancy and after birth. In certain cases, bottle feeding is recommended over breastfeeding.
3. **VACCINATION**: Currently, there is no approved vaccine for HIV or AIDS. The most promising vaccine trial to date, RV 144, conducted in 2009, demonstrated a partial reduction in transmission risk by approximately 30%, which has given researchers hope for the development of a more effective vaccine. Ongoing trials continue to investigate the potential of the RV 144 vaccine.**[1]**

1.5: TREATMENT: Currently, there is no cure or dependable vaccine for HIV. The management of the disease relies on highly active antiretroviral therapy (HAART), which helps to slow its progression. As of 2010, more than 6.6 million people in low- and middle-income of opportunistic infections.

1. **ANTIVIRAL THERAPY**: The standard treatment for HIV involves HAART regimens, which include at least three medications from different antiretroviral classes. Typically, the initial therapy consists of a non-nucleoside reverse transcriptase inhibitor (NNRTI) combined with two nucleoside analogue reverse transcriptase inhibitors (NRTIs) like zidovudine (AZT) or tenofovir (TDF), paired with lamivudine (3TC) or emtricitabine (FTC). If this regimen loses its effectiveness, combinations that include protease inhibitors (PIs) may be used instead.

2. **ALTERNATIVE MEDICINE**: In the United States, around 60% of people with HIV use complementary or alternative medicine, despite most treatments lacking proven effectiveness. The use of herbal medicines does not have strong evidence to support their benefits. However, there is sufficient evidence to consider medical cannabis as a potential option to boost appetite or aid in weight gain.**[4]**

2: **HIV/AIDS in India**

HIV/AIDS (Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome) ranks as the second most contagious disease globally and is a major public health concern in India, which has the third largest HIV epidemic in the world. The widespread prevalence of HIV across India indicates its transmission from urban to rural areas and from individuals engaging in high-risk behaviors to the general population. Additionally, the modes of HIV transmission vary significantly between different states and even within regions of the same state. In India, two distinct types of HIV epidemics are observed: in northeastern India, the epidemic is primarily spread among Intravenous Drug Users (IDUs), whereas in the rest of the country, it is predominantly transmitted through sexual contact **[5]**

2.1: ORIGINS OF HIV/AIDS IN INDIA:

Since the first case of AIDS was identified in India in 1986, HIV infections have been documented across all states and union territories. Initially, cases were predominantly among commercial sex workers in Mumbai and Chennai, as well as injecting drug users in Manipur. Subsequently, the disease spread rapidly from these epicenters to neighboring regions. Presently, HIV/AIDS has reached epidemic proportions in several heavily affected states such as Maharashtra, Andhra Pradesh, Karnataka, Mizoram, Nagaland, Manipur, and Telangana. The epidemic tends to be concentrated in specific districts within these states. **[6]**

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2.2: SPREADS OF HIV/AIDS ACROSS INDIAN STATES:

The extensive size of India presents challenges in thoroughly assessing the nationwide impact of HIV. Nationally, around 0.20 percent of India's population is affected by HIV (NACO, 2022). Despite a notable increase in HIV prevalence since the beginning of the epidemic, studies indicate a decrease in infection rates in southern India, which has been heavily impacted by AIDS.**[7]**

The identification of high-prevalence districts for focused intervention stems from the ongoing analysis of HIV sentinel surveillance data. This surveillance involves periodic assessments of HIV prevalence rates within specific population subsets known as "Sentinel groups." States and Union Territories are categorized based on the prevalence of HIV among different risk groups, classifying them as high, moderate, or low prevalence areas. This categorization informs targeted action plans aimed at addressing HIV/AIDS within these regions (NACO, 2022).**[8]**

In total, 44 locations in 41 districts across India reported a prevalence of HIV at 1% or higher, which is the lowest since 2003. Specifically, seven districts in Nagaland, five in Mizoram, three each in Manipur and Meghalaya, and two in Tripura (North Tripura, West Tripura) recorded HIV prevalence rates of 1% or higher. **[9]**

In 2023, India experienced a notable decrease in new HIV infections, reporting around 44.23 thousand cases, which marks a significant decline compared to the period from 2010 to 2023. Several states and union territories have exceeded the national average in reducing infection rates. However, regions such as Tripura, Arunachal Pradesh, and Meghalaya have seen increases of 524.41%, 469.84%, and 124.70% respectively in infection rates during the same period (Source: NACO, 2023).

In India, AIDS-related deaths (ARD) were reported at 79.26 thousand in 2023. Most states and Union Territories (UTs) have seen a consistent annual decline in ARD cases, with several states experiencing reductions surpassing the national average between 2010 and 2022. However, Tripura (300%), Arunachal Pradesh, Punjab, and Delhi have seen increasing trends in ARD cases during this period (Source: NACO, 2023). **[10]**

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3: TRIPURA:

Fig. 1- Map of Tripura

Tripura, the third smallest state in India, is renowned for its natural beauty, covering an area of 10,491 square kilometers. The state is home to 19 distinct tribes, including the Bill, Bhutia, Chaimal, Chakma, Garos, Halam, Khasia, Jamatia, Noatia, Orang, Reang, Munda, Tripuri, Lusai, Kukis, Uchoi, Mog, Santal, and Lepcha. It experiences a tropical climate characterized by high heat and humidity, with an average annual rainfall of 2,500 mm. Tripura is divided into eight districts: West Tripura, South Tripura, Gomati, North Tripura, Dhalai, Unakoti, Khowai, and Sepahijala.

According to the 2011 census, Tripura has a total population of 36.74 lakhs, with approximately one-third of the population belonging to Scheduled Tribes.**[11]** Tripura boasts Agartala as its capital city. It shares borders with Assam and Mizoram to the east and International Border with Bangladesh to the rest three sides.

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3.1: HISTORICAL BACKGROUND TO HIV/AIDS EMERGENCE AND SPREAD IN TRIPURA:

HIV made its way into Tripura alongside the influx of intravenous (IV) drugs. Traffickers and dealers frequently engaged in "self-testing" heroin, leading to needle sharing with traders in Mandalay, Myanmar. This behavior resulted in HIV transmission among them.

HIV/AIDS was first reported in Tripura in the mid-1990s. Initially, cases were linked to injecting drug use (IDU), as the state shares borders with Bangladesh and Myanmar, where drug trafficking routes exist. IDU, particularly among vulnerable populations like truck drivers and migrant workers, contributed significantly to the spread of HIV/AIDS. Lack of awareness and limited access to healthcare services exacerbated the situation.

3.2: DRUG ABUSE AND SPREAD OF HIV/AIDS IN THE STATE:

In Tripura, the spread of AIDS has become a pressing public health crisis. According to the most recent epidemiological analysis of HIV/AIDS up to January 2024, conducted by the Tripura State AIDS Control Society, there are over 670 documented cases of HIV-positive individuals in the region. However, officials from TSACS suggest that the actual number of HIV-positive cases exceeds 1,000, indicating a significant underreporting of cases. It is highlighted that the primary mode of HIV transmission is through the use and sharing of contaminated needles among intravenous drug users.
Most intravenous drug users (IDUs) in Tripura are young, primarily aged between 15 and 35 years. Rural IDUs have slightly higher infection rates compared to their urban counterparts. These individuals serve as the primary source of HIV transmission through heterosexual activity. However, the HIV/AIDS epidemic has expanded beyond IDUs to include their female partners and children, as well as others in the community. A growing number of infections are observed among the younger working population. Essentially, the sharing of contaminated needles among IDUs and widespread unprotected sexual encounters among infected individuals are the primary modes of HIV transmission in Tripura today.
The increasing population of young drug users mainly are students in the state has exacerbated the existing situation, leading to concerning developments. In Tripura, 47 students died, 828 are HIV positive, primarily from intravenous drug use. Most cases involve affluent families. The Tripura AIDS Control Society has identified students from 220 schools and 24 colleges and universities who are involved in injectable drug use.**[12]**

Table-1: Trend of detection of HIV infection among Injecting Drug User (Testing Vs found HIV positive) over the past few years:

Financial Year	Blood sample tested for HIV among IDUs	HIV Positive	HIV positivity among the IDUs
2015-16	912	11	**1.2**
2016-17	835	32	**3.8**
2017-18	716	31	**4.3**
2018-19	1004	33	**3.3**
2019-20	1412	143	**10.1**

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2020-21	3385	310	**9.2**
2021-22	5556	564	**10.2**
2022-23	8231	868	**10.5**
2023-24 **as on December 23**	6757	670	**9.9**

Source: *Tripura State AIDS Control Society (*TSACS) (2024),

Heroin is the predominant illicit substance commonly injected. North Tripura, located in the northern part of the state adjacent to Mizoram. These regions lie in proximity to the Golden Triangle, a notorious area known for producing a significant portion of the world's heroin. As a result of its position as a transit point in the illicit global drug trade, Tripura sees an influx of high-quality heroin that is widely accessible at competitive prices.

3.3: SPREAD OF HIV/AIDS THROUGH MSMs AND FSWs:

There is now widespread recognition that the HIV crisis in Tripura goes beyond the scope of injecting drug users (IDUs). It also affects young, widowed women who are HIV positive, many of whom contracted the virus through monogamous heterosexual relationships without any history of drug use. Furthermore, societal acceptance of other vulnerable groups such as men who have sex with men (MSMs) and a dispersed sex trade remains inadequate. These issues are intricately connected to a range of complex social, political, and legal factors.

Over time, the HIV epidemic in Tripura has reached alarming proportions. According to the 2023 Sentinel Surveillance Report, the prevalence rates of HIV among injecting drug users (IDUs), men who have sex with men (MSMs), and female sex workers (FSWs) are reported at 8.06%, 1.61%, and 0.08%, respectively, underscoring a substantial cause for apprehension.

In Tripura, as in other places, many people avoid voluntary HIV testing due to fears of social stigma and discrimination. This reluctance is particularly pronounced among men who have sex with men (MSM), many of whom conceal their sexual orientation due to societal pressures, thereby reducing their visibility and hindering targeted HIV/AIDS interventions.
In Tripura, although formal red-light districts may not be widespread, there are other forms of sex work present. However, there has been a troubling increase in HIV prevalence within this demographic in recent years. According to the Sentinel Surveillance Report 2023 (NACO, 2023), approximately 6,242 female sex workers (FSWs) are estimated to reside in the state.
Research indicates that in Tripura, female sex workers (FSWs) can be categorized into two groups: independent operators (free FSWs) and those working under agents. Free FSWs blend into the general population, work independently without intermediaries, and actively build social networks. They often have unique styles of dress and behavior, demonstrate significant experience in their work, and are typically older, including some who are married, divorced, or widowed.

3.4: EMERGING SCENARIO

The Epidemiological Analysis of HIV/AIDS in Tripura conducted by NACO (2023) for the year 2023 revealed significant findings. A total of 1330 individuals tested positive for HIV. Additionally, 10,126

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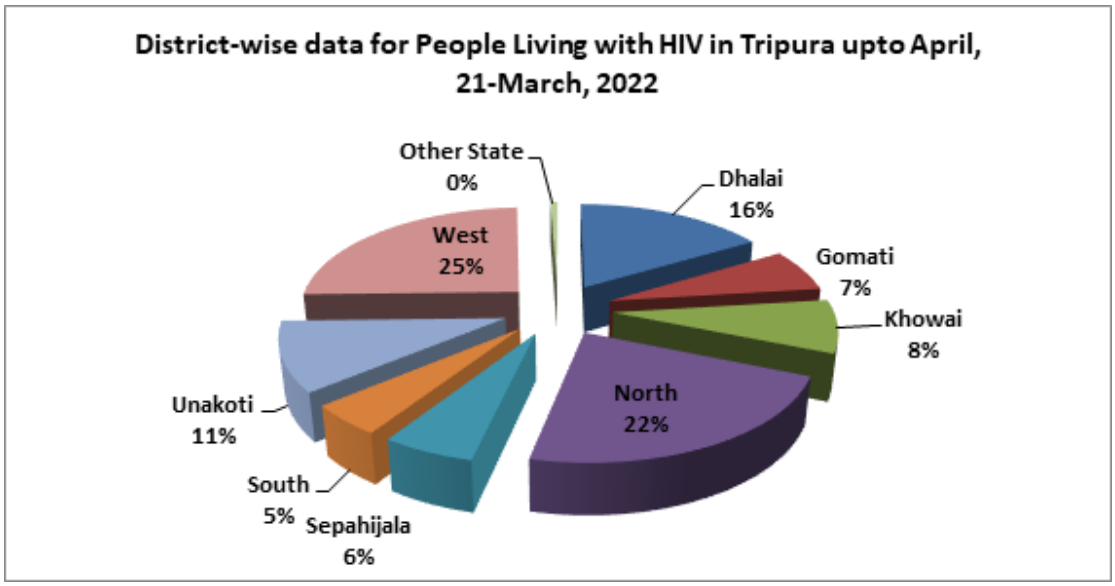
numbers of people living with HIV, there has been a steady upgrade of 524.41 % in the annual rate of new HIV infections. And 44 deaths due to AIDS were recorded.

Among the 41 districts identified as high prevalence areas for AIDS by NACO in India, two are in Tripura, namely West Tripura, and North Tripura district stands out prominently on the HIV/AIDS radar within Tripura, as reported by HIV Sentinel Surveillance Report 2021. The district's proximity to Mizoram & International boundaries and its porous border facilitates heroin smuggling, leading to a concerning number of young individuals succumbing to drug addiction. Additionally, factors such as mother-to-child transmission, unprotected sexual practices, and marital infidelity contribute significantly to the escalating HIV/AIDS cases in the region.

TABLE 2: DISTRICT-WISE DISTRIBUTION OF HIV prevalence % (Sentinel-Surveillance)

District	Total
Dhalai	465
Gomati	187
Khowai	226
North	604
Sepahijala	154
South	102
Unakoti	305
West	735
Other State	22



Source: (TSACS) (2021-22),

Among individuals considered 'at-risk', the national prevalence of sero-positivity stood at 0.47%, while in Tripura, the prevalence ranged 1.25%.

Table 3: -HIV sero-positivity noted in routine testing, 2022-23.

Risk Group	Percentage
At- risk client	1.25
Pregnant Women	0.08
FSW	0.24

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MSM	1.61
IDU	8.06
Prisoners	3.54
Truckers	0.34

Table 4: Documented accounts of HIV/AIDS cases in Tripura

Tripura		
Details	Data	Sources
Population of the state (2011 Census)	36,73,917	Census 2011, Tripura
Virology	HIV-1 and HIV-2	TSACS
Highest prevalence (%) Year	0.37% (2023)	TSACS
Groups at risk	IDU, Heterosexual	TSACS
Control Program (Year Laid out)	3rd October 1999	TSACS
Prevalence (%) of adults (aged 15-49)	0.37 (0.33-0.44)	NACO HIV Estimates 2023
People who have HIV/AIDS	10,126 (8,766-12,112)	NACO HIV Estimates 2023
Yearly new contamination	1330(1093-1,722)	NACO HIV Estimates 2023
Death caused by AIDS	44(33-61)	NACO HIV Estimates 2023

Table-5: Year-wise Distribution of Testing for HIV and found HIV Positive up to April,23-January 2024:

Year	Total No of Testing for HIV	Total No of HIV Positive	Positivity Rate (%)
2018-19	148046	338	**0.23**
2019-20	1,59,946	442	**0.27**
2020-21	1,26,629	487	**0.38**
2021-22	1,75,961	1124	**0.64**
2022-23	2,06,864	1845	**0.89**
April- January ,2024	**1,44,117**	**1472**	**1.02**

Source: TSACS (2024), Epidemiological Analysis of HIV/AIDS in Tripura, 2018– 2024.

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Sr. No.	Basic Service Division (ICTC/FICTC/PPP ICTC/ Mobile)	April,18 - March,2019	April,19 - March,20	April,20 - March,21	April,21 - March,22
1	General Client Tested	1,00,053	1,03,988	76804	71685
2	General Client Positive	305	419	467	1132
3	Pregnant Women Tested	48025	55958	49825	41263
4	No. of Positive	33	23	20	23
Sr. No.	**Blood Transfusion Services Division**				
1	No. of blood donation camp organized NACO Supported 6 banks	517	532	395	453 camps
2	Total collection for the period (Voluntary + Replacement) NACO Supported 6 banks	25075	27524	22643	28,581 unit (Vol- 13211 + Repl- 15370)
3	Percentage of TTI for Human Immunodeficiency Virus	0.10%	0.10%	0.001%	0.002%

Source: TSACS, Epidemiological Analysis of HIV/AIDS in Tripura, 2018– 2022.

Female Sex Worker:

Indicator	2018-19		2019-20		2020-21		April,21-March,22	
	Target	Achievement	Target	Target	Target	Achievement	Target	Achievement
Coverage	4195	4326	4342	2555	2555	2760	2555	2733
Clinic Attend	16780	16013	17360	10220	10220	8308	10220	9845
Treated for STI/STD	839	859	868	511	511	186	511	156
Tested for Human Immunodeficiency Virus	8390	8994	8684	5110	5110	4595	5110	4898
Human Immunodeficiency Virus Positive	-	22	-	-	-	6	-	8
Linked to Anti-Retroviral Therapy Centre	22	22	16	8	8	6	8	8

Source: TSACS, Epidemiological Analysis of HIV/AIDS in Tripura, 2018– 2022.

Trucker:

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Indicator	2020-21		April,21- March,22	
	Target	Achievement	Target	Achievement
Coverage	5000	5008	5000	5041
Clinic Attend	5000	5194	5000	5041
Treated for STI/STD	500	61	500	17
Tested for Human Immunodeficiency Virus	1500	962	1500	1469
Human Immunodeficiency Virus Positive	-	2	-	5
Linked to Anti-Retroviral Therapy Centre	2	2	5	2

*Source: TSACS, Epidemiological Analysis of HIV/AIDS in Tripura, 2018– 2022.**[13]***

4. Importance of Yoga in AIDS:

Yoga is an ancient mind body practice that involves physical movement or postures, breathing techniques, and meditation.**[14]**

4.1 Yoga:

Yoga is derived from the Sanskrit word *"yuj,"* meaning "to control," "to yoke," or "to unite," and is commonly understood as a method of discipline that promotes unity of body, mind, and spirit. The Indian sage Patanjali systematized the philosophy and practice of yoga in the *Yoga Sutras* approximately 2,000 years ago, where he described the eightfold path known as *Ashtanga Yoga*.

The eight limbs include Yama (universal ethical principles), Niyama (personal observances), Asana (physical postures), Pranayama (regulation of breath), Pratyahara (withdrawal or strengthening of the senses), Dharana (concentration), Dhyana (meditation), and Samadhi (state of self-realization). In contemporary practice, many individuals primarily engage with the third and fourth limbs—asana and pranayama.

The term *asana* refers to a posture or pose and is practiced to enhance physical strength, stamina, and flexibility, while also contributing to bodily purification. Asanas are designed to open the body's internal pathways, particularly the spinal channels, allowing energy to flow freely. This improved circulation of *prana* (vital energy) enhances breath awareness and supports a deeper connection between the body and the mind.

4.2 HIV AND YOGA:

Yoga is an ideal exercise for people with HIV. Yoga consists of three parts: exercise, breathing, and meditation. The yoga exercises are easy movements that extend and toughen the nervous system, main muscle groups, compress on glands and organs to motivate the hormonal system, to progress circulation in body. It's makes our brain and all vital organs receive oxygenated blood and nutrients. A habitual perform of a yoga exercises will increase our energy levels and feelings of happiness. The breathing exercises are most excellent tool for handle with stress and anxiety. By concentrating simply on the movements of the breath, build concentration, willpower, and the ability to reduce the hurtful possessions of a stress reaction. [15] An increase in CD4 cell counts was observed among individuals with HIV/AIDS who adhered to naturopathy and yoga interventions, indicating that lifestyle-based approaches may positively influence immune function in this population. [16] Forward-bending

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postures such as Trikonasana, Vajrasana, Paschimottasana, and Uttanasana involve chest compression and emphasize exhalation, which helps induce relaxation. These poses redirect blood circulation and energy flow toward the thymus gland, supporting its regulation of T-cells and the secretion of thymosin hormones. Thymosins play a vital role in regulating white blood cells—especially T-cells—and in coordinating the activity of other hormones.

Back-bending postures like Bhujangasana, Supta Baddha Konasana, Supta Virasana, and Viparita Karani stimulate the thymus gland, enhancing its function and thereby strengthening the immune system.

Relaxation postures help suppress the release of stress hormones such as norepinephrine and cortisol, while promoting the production of beneficial chemicals like serotonin and cytokines. Postures such as Sukhasana and Makrasana encourage deep relaxation and support overall physiological balance.[15]

Trikonasana

Vajrasana

Paschimottasana

Uttanasana

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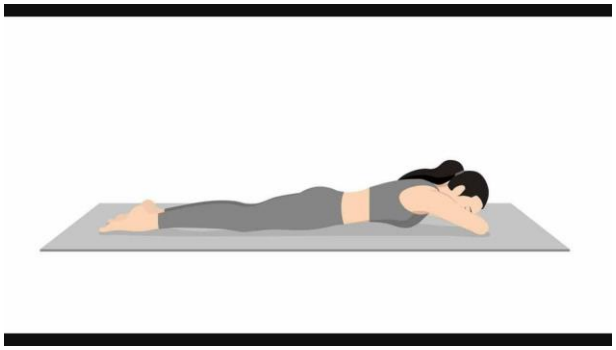
Bhujansansa

Supta Baddha Konasana

Supta Virasana

Viparita Karani



Makrasana

Sukhasana

Fig. 2: following are the various types of yoga that helps in AIDS

CONCLUSION:

Tackling the AIDS crisis in Tripura requires unwavering dedication from both governmental and non-governmental organizations. Despite progress in access to antiretroviral therapy and awareness campaigns, significant obstacles like stigma, discrimination, and inadequate healthcare infrastructure

still impede progress. An effective response necessitates a comprehensive approach that includes strong healthcare services, extensive education, and community support. Additionally, focusing on nutrition, especially by incorporating fruits into the diet, can greatly enhance health outcomes and the quality of life for those living with AIDS. By prioritizing these strategies, Tripura can make substantial advancements in fighting the AIDS epidemic and promoting a healthier future for its residents. Yoga plays a significant supportive role in the comprehensive management of HIV/AIDS. By improving immune resilience, mental health, and physical functioning, yoga enhances overall well-being and quality of life. Integrating yoga into HIV/AIDS care programs can provide a holistic and patient-centered approach to long-term disease management.

REFERENCE:

[1]. De, B., Das, L., Phijam, M., Biswas, P., Choudhury, R., & Chakraborty, H. AIDS in India with a reference to the state Manipur and the importance of fruits in AIDS. *JECET*; June 2024 – August 2024. Sec. A; Vol.13. No. 3, 201-220.
[2]. (https://www.medicaldaily.com/ho-hiv-attacks-body-and-progress)
[3]. Mirza S , HIV Surveillance and Protection from HIV. Epidemiol Sci,2022; 12: 421.
[4]. **Wikipedia** (https//en.m.wikipedia.org/wiki/HIV/AIDS)
[5]. (shodhganga.inflibnet.ac.in/bit stream/ 10603/14359/8/08-chapter...)
[6]. Bhagavathula AS, Clark CCT, Sharma R, Chhabra M, Vidyasagar K, Chattu VK. Knowledge and attitude towards HIV/AIDS in India: A systematic review and meta-analysis of 47 studies from 2010-2020. *Health Promot Perspect*. 2021 May 19;11(2):148-160.
[7]. Kumar, R., Jha, P., Arora, P., Mony, P., Bhatia, P., Millson, P., et al. Trends in HIV-1 in young adults in south India from 2000 to 2004: a prevalence study. *The Lancet*,2006; *367*(9517), 1164-1172.
[8]. National AIDS Control Organisation & ICMR-National Institute of Medical Statistics (2023). India HIV Estimates 2022: Technical Report. New Delhi: NACO, Ministry of Health & Family Welfare, Government of India.
[9]. National AIDS Control Organization. ANC HSS Plus 2021: Technical Report. New Delhi: NACO, Ministry of Health and Family Welfare, Government of India; 2022
[10]. National AIDS Control Organization & ICMR-National Institute of Medical Statistics (2024). India HIV Estimates 2023: Fact Sheet. New Delhi: NACO, Ministry of Health and Family Welfare, Government of India.
[11]. Chakraborty H, Detection and Quantification of Alcohol in Home Made Rice Beer of Tripura Using Headspace Gc-Fid, *Int. J. Multidiscip. Res;* **2023**, Volume 5, Issue 4, 1-8
[12]. http://timesofindia.indiatimes.com/articleshow/111526805.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
[13]. https://health.tripura.gov.in/aids-control-programme.
[14]. Shannahoff-Khalsa DS. An introduction to Kundalini yoga meditation techniques that are specific for the treatment of psychiatric disorders. The Journal of Alternative & Complementary Medicine. 2004;10(1):91–101.
[15]. Rajathi Sakthivel, Rajendran Shankar Shanmugam, Noor Mohamed Usman, Somasekar Ramaswamy, Latha Rethinasabapathi. The Role of Hatha Yoga in Human Immuno Deficiency Virus (HIV)/Acquired Immuno Deficiency Syndrome (AIDS). AYUSHDHARA, 2015;2(5):368-372.
[16]. http://www.yogapoint.com/therapy/yoga_for_peo ple _with_HIV.htm#S.