

Programme: MSc Public Health and Social Care in Practice

Module: Community Care and Management of Longer-term Conditions

Topic : HIV in Adults: Diagnosis, Management, Prevention & Long-Term Care in the UK

— A Professional Practice Perspective Based on NICE, NHS & WHO Guidelines

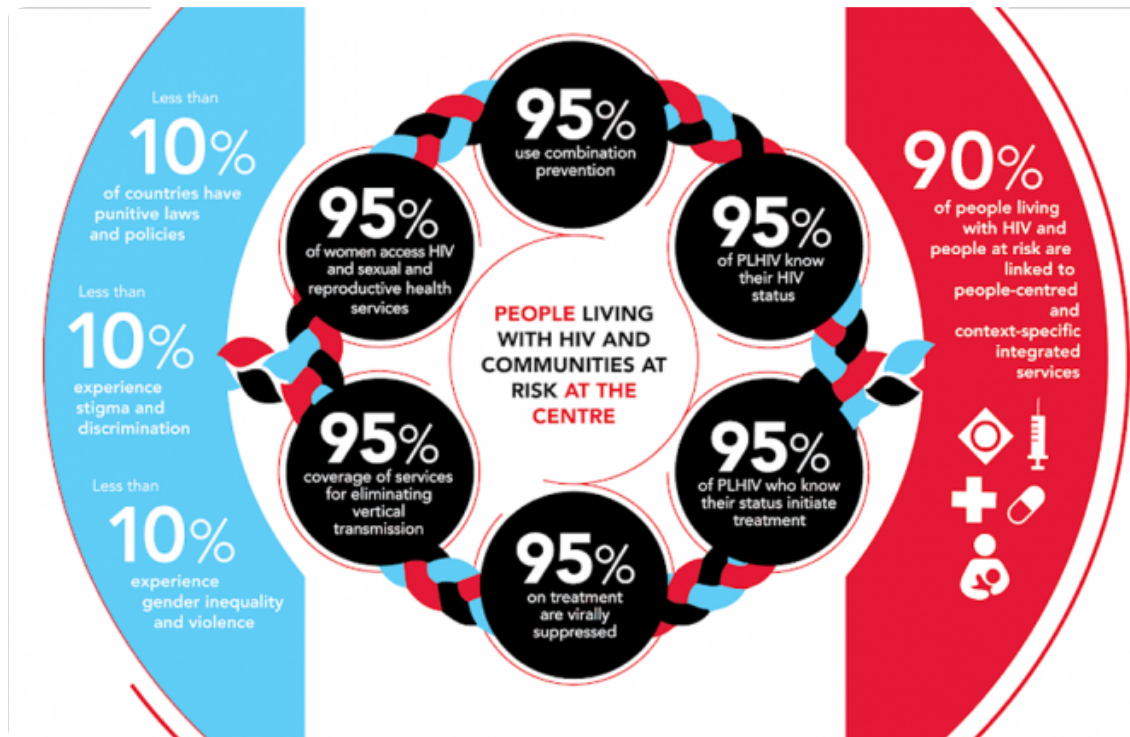
Student ID: 2505873

Student Name: Keshaben Jayeshbhai Khanpara

Lecturer Name : Dr. Brian Mashumba



Introduction and Target Audience



(Source: Unaid, 2025)



The current presentation attempts to provide an analysis of HIV in adults, including its diagnosis, treatment, prevention, and the management of the condition in the long term.



Target audience will comprise nurses and specialist clinicians involved in the delivery of high-quality HIV assessment, intervention and sustained support.



HIV continues to be a priority in the NICE guidance because of the prevalence, stigma, tardy diagnosis and other complicating comorbidities (Kar, 2025).

Definition of HIV



HIV IS A VIRAL INFECTION, WHICH INFECTS THE IMMUNE CELLS (CD4) GRADUALLY DEPLETING IMMUNE RESPONSE OVER PERIOD OF ABSENCE OF TREATMENT (YAN et al., 2023)



ACCORDING TO WHO, HIV IS A CHRONIC CONTROLLABLE DISEASE THAT NEEDS LIFELONG ANTIRETROVIRAL TREATMENT AND PREVENTION MEASURES (FLEŞERIU ET AL., 2025).

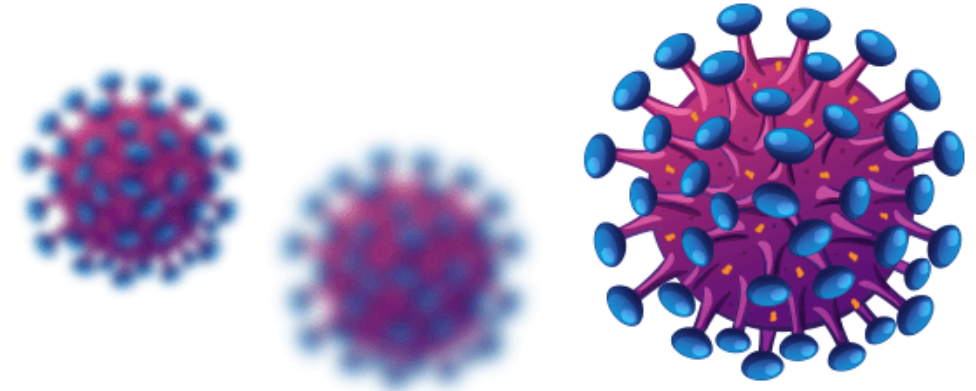


NHS DEFINES HIV AS A VIRUS THAT IS CARRIED THROUGH THE BLOOD AND CAUSES THE DEVELOPMENT OF IMMUNE DEFICIENCY.

WHAT IS HIV?

Human Immunodeficiency Virus (HIV)

is a virus that attacks cells that help the body fight infection.



There's no cure, but it is **treatable** with medicine.

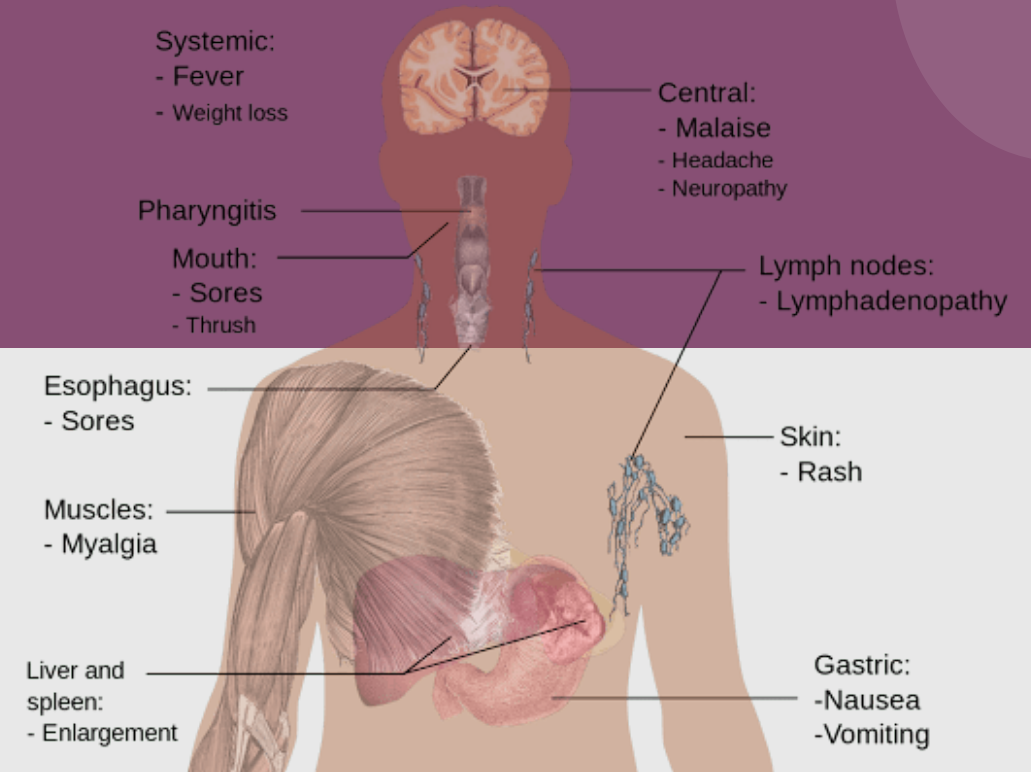


(Source: Hiv.gov, 2021)

Symptoms and clinical presentation

- Some of the symptoms of the acute stage are fever, fatigue, sore throat, lymph node enlargement and flu-like illness in the early stages of infection.
- Chronic stage Chronic stage can be asymptomatic with viral replication persisting and immune deficiency depleting over years of time (Li et al., 2022).
- The stage of AIDS is associated with opportunistic infections, consistent fever, loss of weight, cancer, neurological symptoms and severe immune deficiency (Moliya *et al.*, 2025).

Main symptoms of Acute HIV infection



(Source: Serco, 2025)

Aetiology (Causes & Transmission)

Transmission of HIV is by way of unprotected sex, use of infected needles, and exposure of infected blood products worldwide (Stroffolini and Stroffolini, 2024).

Vertical transmission is where the disease is transmitted in the process of pregnancy, during childbirth or breastfeeding in cases where the antiretroviral prevention is not done effectively (Cardenas et al., 2023)

The maximum risk group across the world is adults who are between twenty five and forty nine years old, and in the developing world, women are disproportionately affected.

A person can get HIV from:



Having unprotected sex



Sharing needles or syringes for drugs, piercings, tattoos, etc.



Getting stuck with a needle that has HIV-infected blood on it



Getting HIV-infected blood, semen, or vaginal fluids into open cuts or sores on the body



Blood transfusion of infected blood

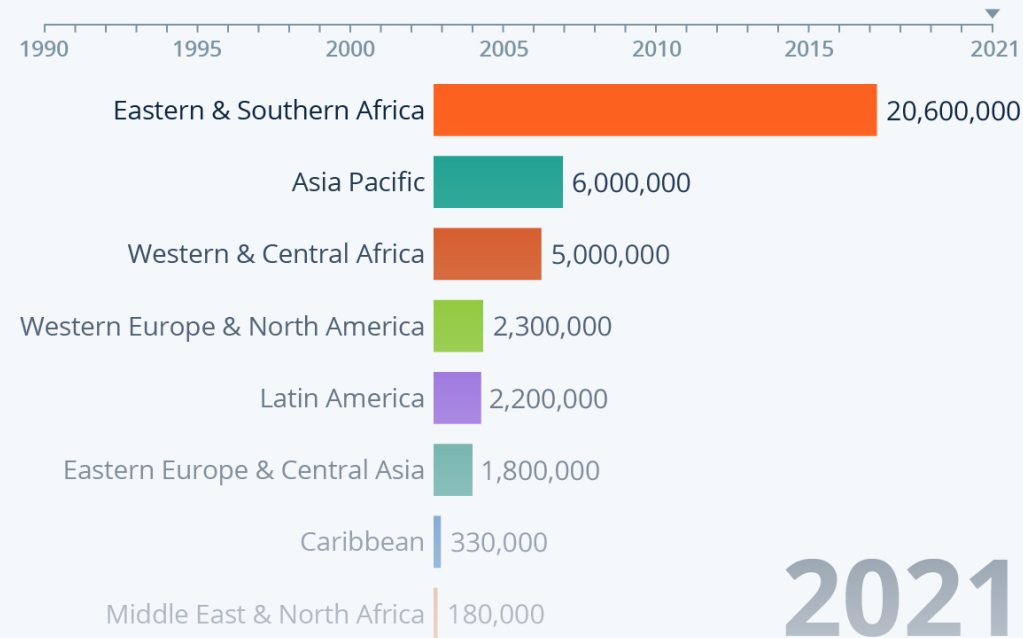


HIV can also be passed to babies during pregnancy, birth, or breastfeeding.

(Source: Lalpath, 2025)

The Global HIV Burden

Estimated number of children and adults living with HIV



Source: UNAIDS

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Epidemiology and Prevalence (UK vs Global)

- According to UKHSA, the number of HIV positive people in the United Kingdom exceeds one hundred six thousand at present.
- Its prevalence is very high across the globe with millions of people being infected, especially in the Sub-Saharan Africa whereby transmissions are disproportionately high (Kusi et al., 2021)
- Trends in UK between twenty ten and twenty-five years indicate that there are declining new diagnosis because of better testing and prevention (Newman *et al.*, 2025).

(Source: Cdn.statcdn, 2022)

Economic and Social Burden



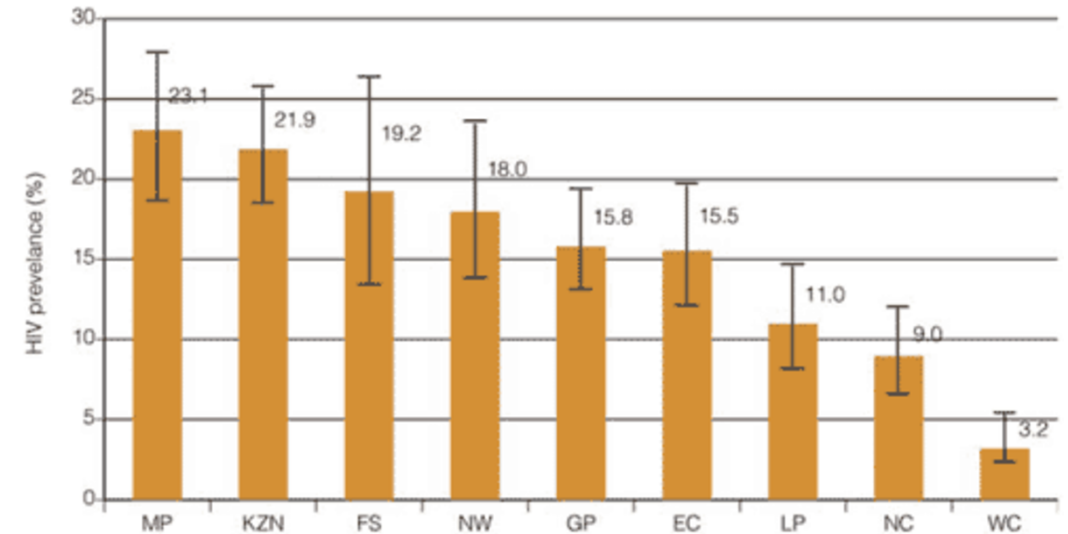
NHS invests large sums of money in lifelong antiretroviral therapy, surveillance and specialist multidisciplinary HIV healthcare services.



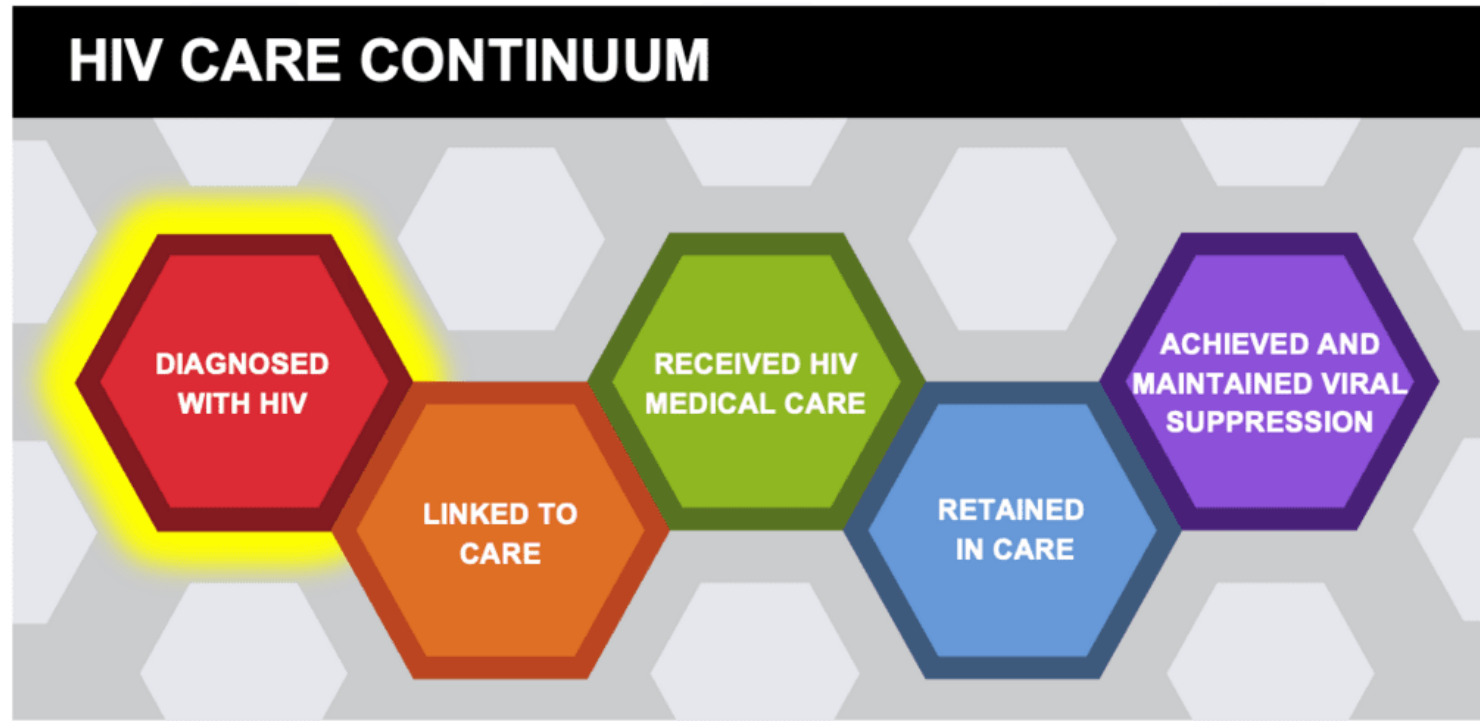
Treatment cost per patient per annum is still considerable, which depends on drugs, specialist care and continuous diagnostic monitoring needs (Torre *et al.*, 2024).



Social burden would contain stigma, discrimination, diminished employment opportunities, mental health problems and ongoing disparities in healthcare availability.



(Source: Semanticscholar.org, 2025)



(Source: Uw.edu, 2025)

Diagnosis and first assessment (NICE Guidelines)

- NICE advises ELISA Screening tests of HIV infection and confirmation NAT testing with the assessment of the virus load (Saifullah *et al.*, 2025).
- Applications in diagnosis are also in CD4 count, screening of opportunistic infections, comorbidity analysis as well as full psychosocial examination of the patient.
- Late diagnosis is still widespread, and poses worse outcomes, preventable morbidity and social inequality in care.

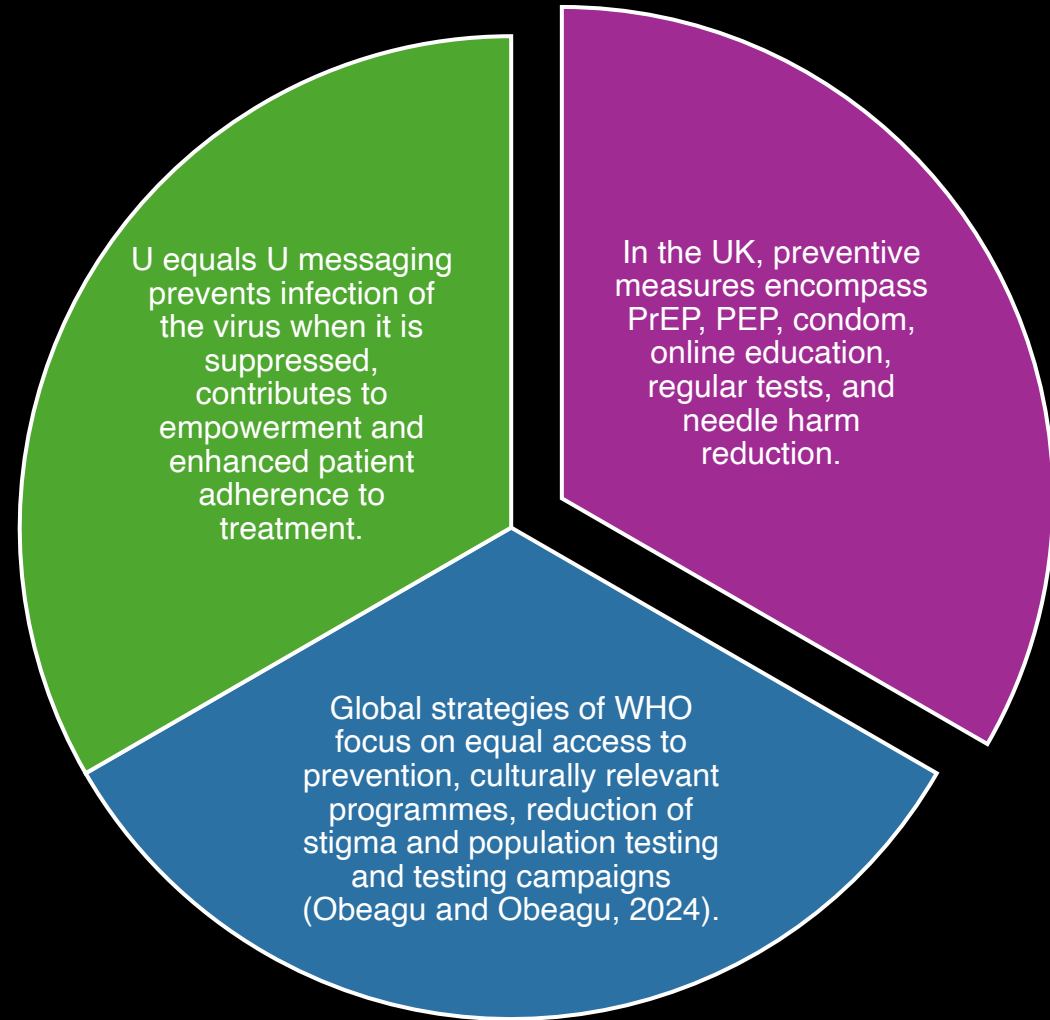
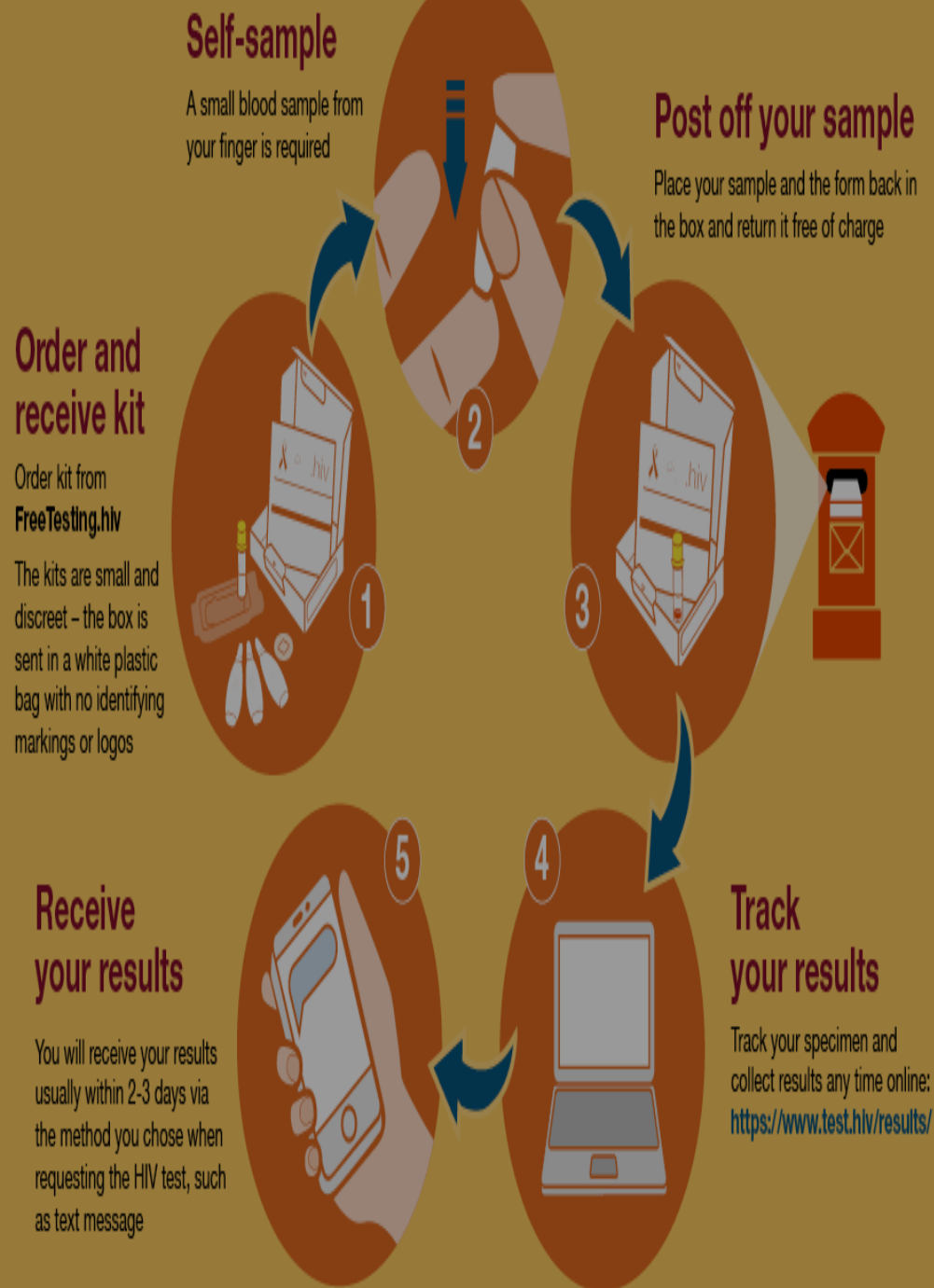
Treatment and management (NICE)

- Tenofovir and Dolutegravir are standard clinical management regimens of antiretroviral therapy that are used as the first line.
- Multidisciplinary care entails the use of nurses, physicians, pharmacists, mental health professionals and social support to enhance the treatment outcomes.
- The strategies of adherence are counselling, digital reminders, monitoring, patient involvement and culturally sensitive individualized care planning (Religioni *et al.*, 2025).



(Source: Hiv.gov, 2025)

Prevention Strategies (UK and Global)

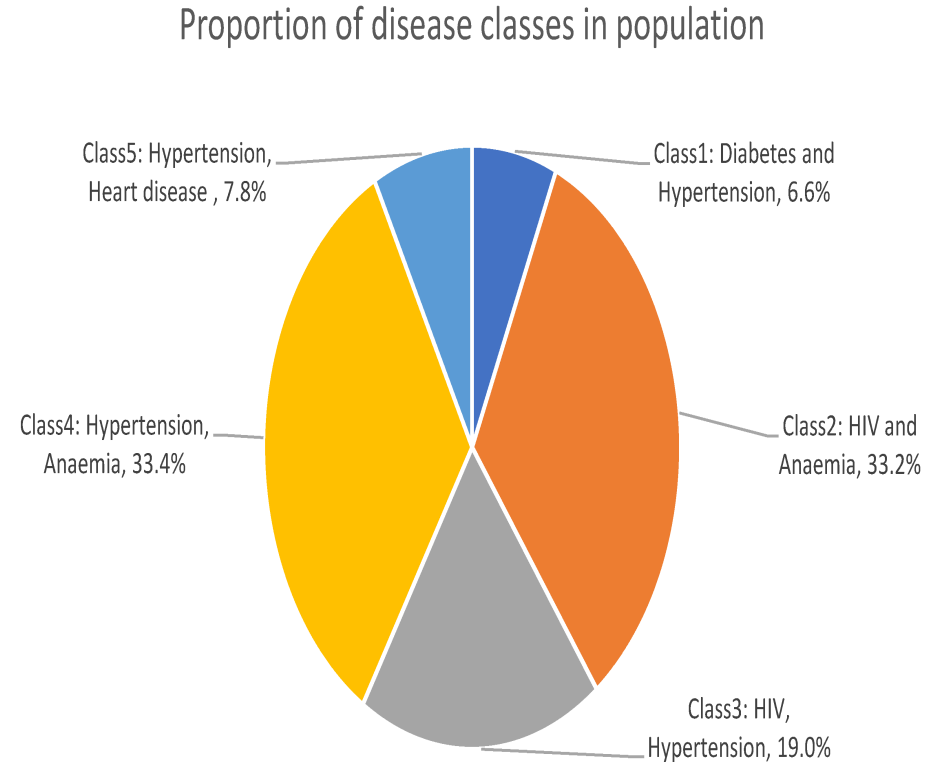


Comorbidity in HIV

The usual comorbidities are tuberculosis, hepatitis B or C, cervical cancer, risk of diabetes and cardiovascular disease.

Depression and anxiety are among the mental health conditions found to be very high among the populations with HIV world over (Ji *et al.*, 2024).

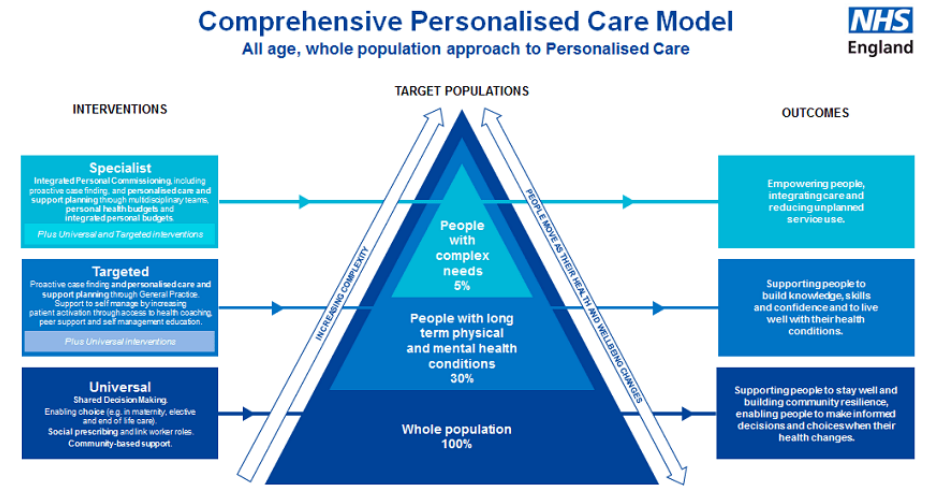
The issue of polypharmacy and drug interactions should be monitored closely to avoid complications and maximise the patient long-term care outcomes.



(Source: Mdpi-res.com, 2025)

Implementation of Comprehensive Personalised Care Model (Six-evidence)

- Shared Decision Making: Joint ART decisions improve adherence and viral suppression.
- Supported Self-Management: Tools and education strengthen daily ART routines and follow-ups.
- Personalised Care Planning: Integrates medical, mental-health, and social needs in HIV.
- Social Prescribing: Connects patients to HIV support groups, counselling, housing services.
- Enabling Choice: Patients choose clinics, treatments, and support services (Melam *et al.*, 2025).
- Personal Health Budgets: Funds tailored long-term HIV support for complex needs.



(Source: Happyhealthylives.uk, 2024)

ICCS Model (WHO)

Application

- The micro level is concerned with patient education, support on adherence, routinely monitoring and better self-management behaviours.
- Meso level incorporates multidisciplinary teams, coordinated services, digital systems and community partnerships in enhancing continuity.
- Macro level gives importance to powerful policies, finances, equity, national guidelines and population-based screening programmes to prevent diseases (González *et al.*, 2025).





Evidence for Comprehensive Care Model

Micro-level evidence (patient level)

- Studies show that digital adherence reminders improve ART adherence by 12–18% in long-term HIV care (such as WHO Digital Health Report).
- Evidence from UK clinics shows that structured self-management education reduces missed appointments by 20%.

Meso-level evidence (service/organisation level)

- Research indicates that multidisciplinary HIV teams improve viral suppression and reduce hospitalisation rates (Elgalib et al., 2018).
- Community-health partnerships increase early testing uptake by 30% in high-risk groups.

Macro-level evidence (policy/system level)

- National PrEP expansion policies (UKHSA, 2023–25) demonstrate a significant drop in new HIV infections (Agbo et al., 2025)
- WHO-guided population screening programmes increase early diagnosis and reduce inequity in access.

Skills, Behaviors and Professional Values



PRACTITIONERS NEED EMPATHY, CONFIDENTIALITY, CULTURAL COMPETENCE, NON-JUDGEMENTAL COMMUNICATION AND TRAUMA-INFORMED APPROACHES THAT WOULD PROMOTE DIGNITY.



ACTIVE LISTENING AND HEALTH COACHING, AS WELL AS MOTIVATIONAL INTERVIEWING, HELP IN BEHAVIOURAL CHANGE AND ENHANCE RELATIONSHIPS BETWEEN THE PATIENT AND THE HEALTHCARE PROFESSIONAL.



ETHICS PRACTICE INVOLVES PROTECTION, ADVANCEMENT OF EQUALITY, JOINT RESPONSIBILITY AND IMPROVEMENT OF THE PROFESSION TOWARDS SAFE EFFECTIVE CARE (VAISHYA *ET AL.*, 2024).

Conclusion and Recommendations

- HIV is a long-term manageable disease, which needs individual lifelong management, prevention strategies and interdisciplinary team care.
- There are models and guidelines that facilitate the enhancement of patient outcomes, inequalities, prevention, early detection and optimum treatment pathways.
- Stronger prevention, expanding access to PrEP, reducing stigma, enhancing digital monitoring and personalised care have been suggested as a recommendation (Verde Hashim *et al.*, 2024).

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Thank
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