

Oral Health, HIV, TB & Smoking: Addressing Behavioral Health



Isabel Rambob, DDS
University of Maryland School of Dentistry
Department of General Dentistry

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Disease Susceptibility

Worsening Outcomes



TB or not TB

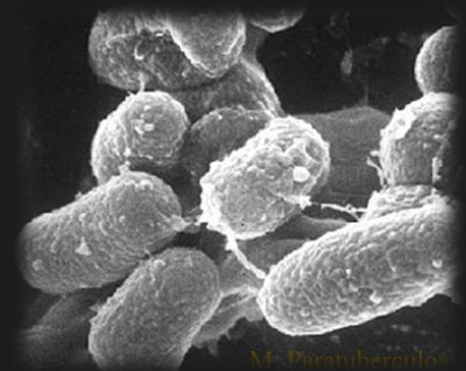


According to WHO (2012), TB remains a major global health problem **(8.6 million new TB cases)**. It ranks as the 2nd leading cause of death from an infectious disease worldwide, after HIV.



TB or not TB

- ✓ TB is caused by *Mycobacterium tuberculosis*, which can be present as either latent infection or active disease.
- ✓ Latent TB infection means that TB bacteria are living in the body but not causing any symptoms.
- ✓ People with latent TB infection are not sick, do not have symptoms, and cannot spread the disease.



TB or not TB

- ✓ TB disease means that the bacteria are multiplying and are destroying body tissues; if not diagnosed and treated properly, **it can be fatal (1.3 million** deaths in 2012).
- ✓ People with TB disease are sick, do have symptoms, and can spread the disease. Only TB disease is infectious; latent TB infection is not.
- ✓ TB disease of the lungs or airways can be spread from person to person through the air when a person with TB disease coughs, sneezes, speaks, or sings.



TB or not TB

UNINFECTED PERSON

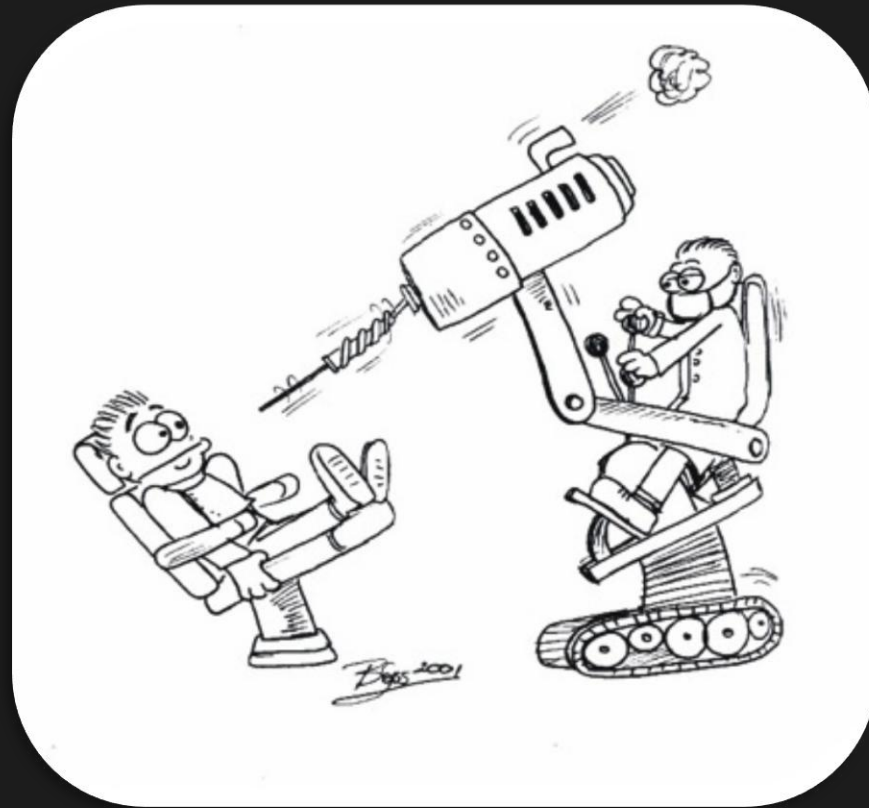


A bad cough
Chest Pain
Weakness
Fatigue
Weight loss
No appetite
Chills
Fever
Sweating at night

MYCOBACTERIUM

INFECTED PERSON





Elective dental treatment should be deferred until the patient has been declared non-infectious by his/her physician.

TB or not TB

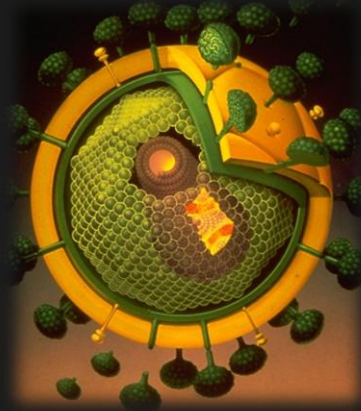
- ✓ Diagnosis delay and non-completion of treatment are two central behavioral challenges for TB control.
- ✓ Patients are expected to seek care and complete treatment.
- ✓ Success in TB detection and treatment requires specific behaviors from patients and health care providers within contexts that facilitate those practices.



TB & HIV

HIV has added a new face to respiratory disease with increased rates of **TB and pneumonia.**

35 million
people living
with HIV



TB & HIV

- ✓ TB is particularly dangerous for people with HIV infection.
- ✓ People who have both HIV infection and **latent TB infection** (LTBI) are **20 to 30** times as likely to develop active TB disease as those who do not have HIV infection.

<http://www.cdc.gov/hiv/resources/factsheets/PDF/hivtb.pdf>

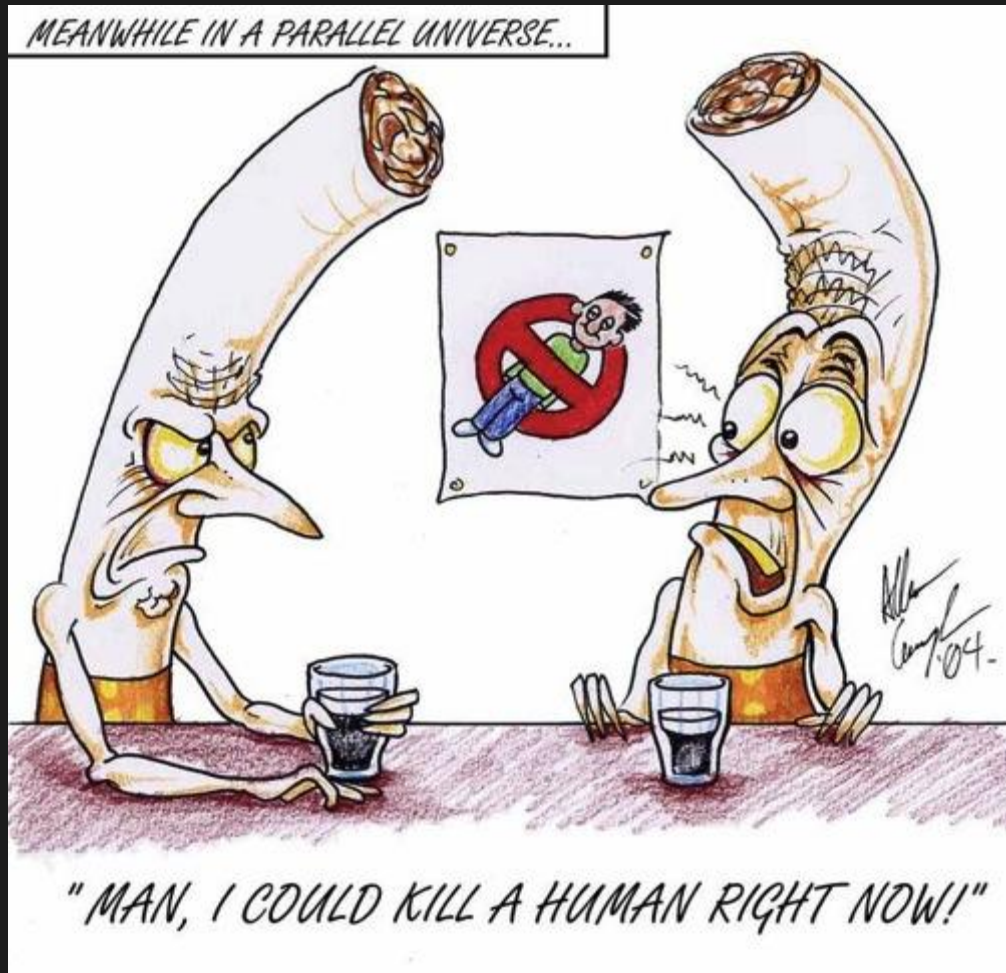


TB & HIV

All individuals newly diagnosed with HIV infection should be tested for TB ASAP.

<http://www.cdc.gov/hiv/resources/factsheets/PDF/hivtb.pdf>





Tobacco use continues to be the leading global cause of preventable death.

Tobacco Facts

- ✓ It kills nearly **6 million people** and causes hundreds of billions of dollars of economic damage worldwide each year.
- ✓ Most of these deaths occur in low- and middle-income countries, and this disparity is expected to widen further over the next several decades.

WHO Report on the Global Tobacco Epidemic, 2011.



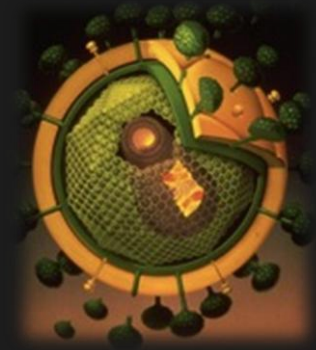
Smoking

- ✓ There is a strong dose-response relationship between the intensity of tobacco dependence counseling and its effectiveness.
- ✓ Because smoking is a habitual behavior, it is important to encourage patients to alter their daily routines, which helps to disassociate related behaviors.



HIV/AIDS & Tobacco Use

- ✓ The proportion of individuals living with HIV/AIDS who are current cigarette smokers is between **47%-65%**.
- ✓ Smoking tobacco has also been found to decrease the effectiveness of HAART therapy.



HIV/AIDS & Tobacco Use

- ✓ Smoking further raises the extremely high risk of contracting TB in HIV + individuals.
- ✓ In addition to increased susceptibility of community-acquired bacterial pneumonia.
- ✓ HIV-infected patients are **2-3 times** more likely to be smokers than their age-matched HIV-uninfected counterparts.



HIV/AIDS, Smoking & Oral Health

- ✓ Tobacco use in HIV+ smokers is responsible for increased **periodontal disease and tooth loss.**
- ✓ HIV+ smokers also have an increased incidence of **cancer of the larynx, pharynx and esophagus.**



HIV/AIDS, Smoking & Oral Health

- ✓ Smokers have an increased risk of oral candidiasis and oral leukoplakia, as well as decreasing healing of oral lesions.
- ✓ There is a marked risk of oral cancer in tobacco users and more than **80%** is squamous cell carcinoma.





Smoking Cessation

The high prevalence of smoking among the HIV population, the many health risks that can result from it, and the proven efficacy of cessation interventions in HIV + patients should encourage clinicians to make smoking cessation for their patients a **high priority**.



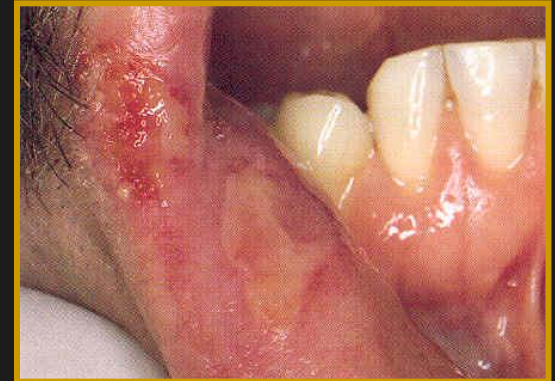
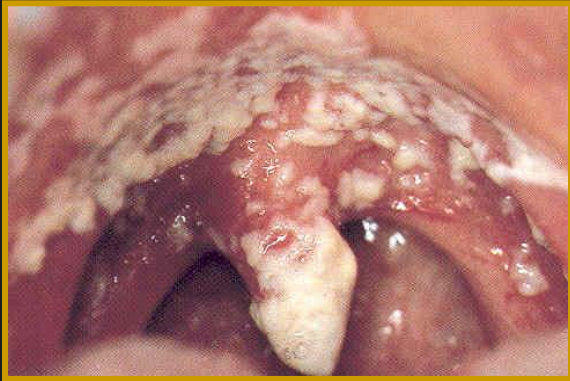
Oral Manifestation of HIV/AIDS

- ✓ Oral manifestations are an especially important component of HIV disease, because **oral lesions** are often the **first overt clinical feature of HIV infection**.
- ✓ Oral lesions are among the most frequent problems associated with HIV infection, with more than **90%** of patients having at least one oral manifestation during the course of their disease.

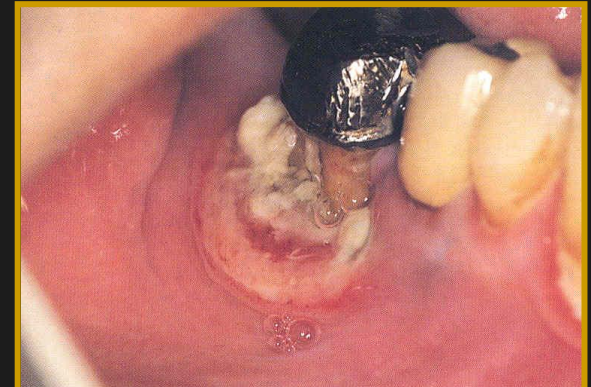
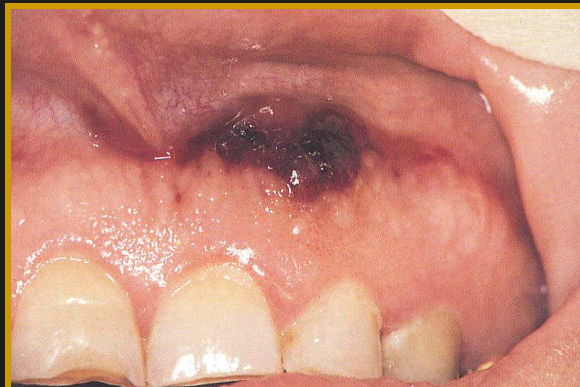
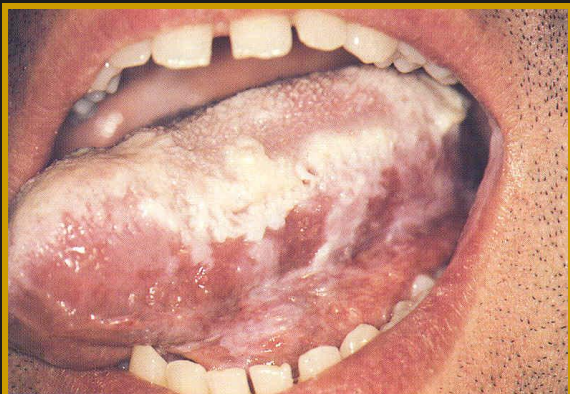
Oral Manifestation of HIV/AIDS

- ✓ Health professionals should be able to recognize HIV-associated oral disease and to provide appropriate care and referral.
- ✓ Factors that predispose to HIV-related oral conditions include CD4+ cell count of less than **200/ μ L**, plasma HIVRNA levels greater than **3000 copies/mL**, xerostomia, poor oral hygiene, and smoking.

Conditions Found More Often in People With HIV



Conditions Found Primarily in People With HIV



Multidisciplinary approach is
necessary to reduce the impact of
these conditions!!!



References

CDC. HIV and Tuberculosis. March 2013.
<http://www.cdc.gov/hiv/resources/factsheets/PDF/hivtb.pdf>

CDC. HIV/AIDS Surveillance Report. 2011 vol.23.
http://www.cdc.gov/hiv/pdf/statitics_2011_HIV_Surveillance_Report_vol_23.pdf

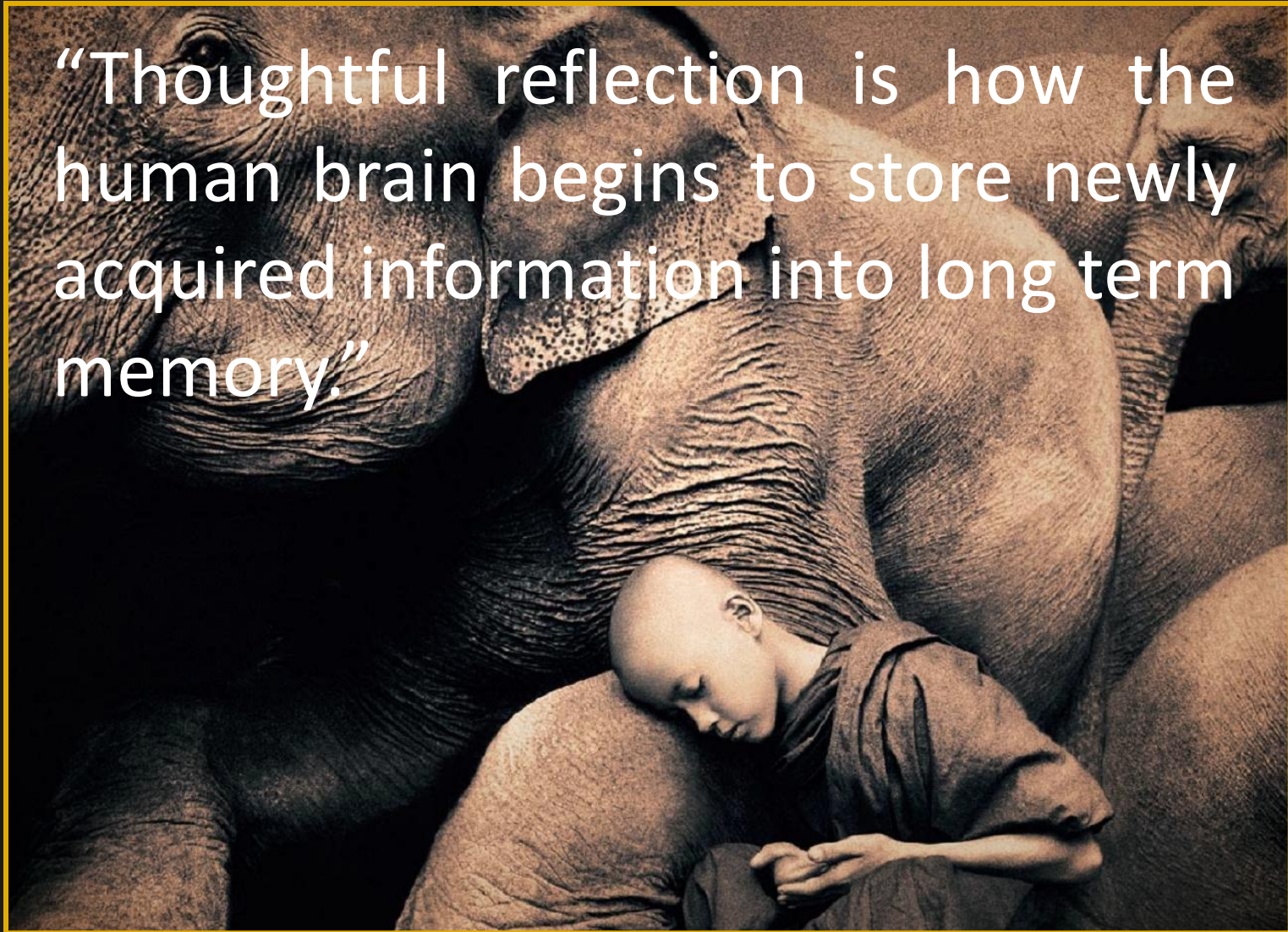
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Smoking Cessation
http://hab.hrsa.gov/deliverhivaidscares/clinicalguide11/cg-308_smoking_cessation.html

Smoking and Tobacco Use: HIV and Smoking.
<http://aids.gov/hiv-aids-basics/staying-healthy-with-hiv-aids/taking-care-of-yourself/smoking-tobacco-use/>

Van Zyl-Smit RN, Brunet L, Pai M, Yew WW. The convergence of the global smoking, COPD, Tuberculosis, HIV, and respiratory infection epidemics. Infect Dis Clin North Am. 2010 September ; 24(3): 693–703

“Thoughtful reflection is how the human brain begins to store newly acquired information into long term memory.”





Thank you!