HIV/AIDS
Primer for Nurse Practitioners
Nursing is Attending to Meaning

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Goals of this presentation

- Offer minimum content levels to enhance your learning needs around HIV/AIDS
- Help you to develop and realize personal learning goals in relation to HIV/AIDS care
- Contribute to a global and national understanding of this epidemic
- Encourage you to become involved in reading, research and self-directed learning
Role of Nurse Practitioners

- To promote health of individuals and communities and
- To prevent and manage illness
HIV/AIDS Statistics

- More than 9 new infections every minute
- More than 50% aged 15-24 years
- 2,000 are under 15 years of age
- 1 out of every 83 adults in the world is HIV positive
- 39.4 million people affected worldwide
- 4.9 million new infections last year and 3.1 million deaths
- Half of those now affected are women and girls

U.N Secretary General Kofi Annan  June 2,2005
HIV in Canada

- 50,000 living with HIV (1 in 620)
  - 1/3 unaware of their infection
- ~ 4,200 new infections per year
- Changing demographics
- Increased Survival
- Patient Empowerment
- Greater Treatment options
- Out Patient vs. Hospital Care
Testing for HIV

- Antibody
- Elisa
- Western Blot
- Rapid HIV tests (OraSure: blood; OraQuick: Oral fluid)
Pre-Screening

- Blood work– CBC., CD3, CD3+CD4, CD4+CD8
- CXR
- Urines
- Hepatology screens
- Vaccinations:
  - Hep A -- 0 and 6 months
  - Hep B-- 0, 1, 6 months
  - Tetanus every 10 years
  - Influenza annually
  - Complete history including sexual history
  - HIV serology (Elisa/immuno blot) VDRL
  - Syphilis
  - Pap smears annually
  - Present meds including homeopathic Complete physical
  - Weight
Sexual History

- Non-judgemental with permission to discuss these issues
- Usually not discussed until problems arise
- Years sexually active
- Married/divorced/single
- Oral/vaginal/anal sex
- ? Condom use
- Drug use ? Type
- Gay/ Straight/ Bi/ trans
- Sexual practices
- Ability to communicate in forthright, comfortable manner
- Be familiar with terminology in gay community: i.e., MSM, Rimming, Fisting, Barebacking
Multidisciplinary Approach

- Nurse Practitioner
- Medical Doctor
- Nurses
- Social Worker
- Dietitian
- Dentist
- Pharmacist
- Pharmaceutical reps
- Clinic staff
- Chaplain
General Principles

- Multidisciplinary approach
- Maximum suppression of VL
- Patient as partner
- Community partnerships
- Health Promotion
- Hope
Primary Infection

- Primary or acute infection
- HIV replicates quickly
- Antibodies not yet produced so test will be negative
- This is window period
- May have flu like symptoms
- Seroconversion, when antibodies are being produced, happens 1-3 months after infection
Asymptomatic Infection

- Few or no symptoms
- Can last for many years
- Long-term non-progressors
- ~ 6-10% who have been infected for 10 or more years show no symptoms
Symptomatic Infection

- Chronic Fatigue
- Weight loss
- Skin problems
- Diarrhea
Reporting

Legally notifiable in all provinces and territories.

All offer at least one of three forms of testing:

- Nominal/name-based
- Non-nominal/non-identifying
- Anonymous—not available in all provinces
HIV Related Symptoms

- Chronic fatigue
- Weight loss
- Skin problems
- Diarrhea
- Swollen lymph nodes
- Fevers
- Night sweats
- Headaches
- Cough
- Neuropathy
- Dysphagia/ Odynophagia
Opportunistic Infections

- Dermatologic conditions
- Oral manifestations
- Fungal infections
- Viral
- Protozoan
- Bacterial
- Malignancies
Factors affecting Progression

- Strength of virus
- Nutrient level
- Mental status and stress level
- Access to care, treatments and support
- Exposure to infections
- Socio-economic factors, i.e. access to housing
Hepatitis

- Hepatitis A
- Hepatitis B
- Hepatitis C
Co-Infections

- Hepatitis C
- T.B.
AIDS Indicator Conditions

- Pneumocystis carinii pneumonia
- Pneumonia, recurrent
- Progressive multifocal leukoencephalopathy
- Salmonella septicemia, recurrent
- Toxoplasmosis of brain
- Wasting syndrome due to HIV
- Herpes simplex, chronic
- Histoplasmosis
- Kaposi’s sarcoma
- Lymphoma
- Mccobacterium avium complex
- Mycobacterium tuberculosis
HIV and Pregnancy

- Prenatal Counselling and testing
- Prenatal team
  - N.P., physician, ID specialist, Obstetrician, nurses, pharmacist, social worker, chaplain
- Antiretroviral therapy during pregnancy
- Antiretroviral therapy during labour
  - AZT, AZT+3TC, Nevirapine
- ARV’s for baby
- No breast feeding
- Testing for baby
Psycho-Social Issues

- Anxiety
- Body image
- Depression
- Guilt
- Hopelessness
- Social isolation
- Stigma
- Poverty
- Homelessness
- Family functioning
- Powerlessness
- Support systems
Treatment Counselling

- ARV therapy
- Prophylactic therapies
- Treatment of OI’s
- Symptom control
- Complementary therapies
- Non-pharmacologic therapies
Treatment Counselling

- Picture sheet of meds
- Medication schedule sheets
- Dosette boxes
- Concomitant meds
- Track medication history
Medications Side Effects

- Nausea
- Vomiting
- Diarrhea
- Metabolic
  - cardiac
  - bone
  - Liver
  - blood
  - lipids (cholesterol; triglycerides)
  - mitochondria
  - lipodystrophy, adiposity
  - (osteoporosis, osteopenia)
Goals of Treatment

- Reduction in viral load as much as possible for as long as possible.
- Restore/preserve immune function
- Improve quality of life.
- Reduce HIV-related morbidity and mortality.
- Prevent/reduce resistant variants
Evaluating HIV Treatment

- Viral load testing
- CD4+(T cell) counts
- opportunistic infections, survival
- Resistance testing
HIV Prevention
Essential Prevention Package

- Widespread public education about HIV
- Promotion of prevention skills
- Condom availability (male and female) with consistent use
- Correctly using a condom
- Diagnose and treat STD’s
- Early sex education
- If HIV- stay negative
- If HIV+--prevent transmission to others
- Be faithful
- Treatment for drug and alcohol abuse
HIV Nursing Toolkit

- ANAC Core Curriculum
- HIV Care: A primer and Resource Guide for Family Physicians
- Handbook of HIV Drug Therapy and CPS
- Lab Handbook
- Health Assessment Skills
- Photo card of HIV medications
- Support of colleagues
Nursing Practice

Attending to Meaning

- Caring
- Clinical Skills
- Compassion
- Communication
- Counselling
Internet Resources

- www.catie.ca
  English/French fact sheets with Nursing resources
- www.aidsinfonet.org
  English/French/Spanish
- www.hivinsite.ucsf.edu/Insite
  Treatment guidelines
- www.aidsinfo.nih.gov
- www.hivandhepatitis.org
- www.canacaciis.org