PREVALENCE OF MEDICAL CONDITIONS OF MALE INMATES WITHIN A COMMUNITY CORRECTIONS POPULATION

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Background

- At midyear 2005 there were 2,186,230 prisoners.
- 87% were males.
- Inmates with sentence of longer than 24 months have 70% likelihood to report a significant medical problem.
- Inmates greater than age 45 have approximately a 45% chance to develop a chronic medical condition.
- Large number of inmates being released yearly having received poor or no health care.
- Potential for increased burden of the public health system.
- Few inmates receive a balanced diet and adequate exercise.
- 8% of inmate population have some form of impaired vision (double the general population).
- Poor oral health may lead to increased risk of vascular disease.
- Estimated 438,486 inmates with either DM, HTN, or CAD.
- Rate of syphilis infections may be 11x greater in prison facilities.
- 62% of chlamydia infections go unrecognized.
- Prevalence of AIDS is 5x greater than the general population.
- Increased risk of acquiring TB or Hepatitis.
- Approximately 187,100 mentally inmates classified as mentally ill.
- Looked at the health status of male prisoners in the Washington County Corrections.
- Hope to learn current and past state of health and make recommendations to improve access to this population.
Methods

- Data was collected at the Washington County Corrections in Hillsboro, Oregon.
- All participants were volunteers from the population.
- First year students from the Pacific University Physician Assistant program administered the health questionnaires after completing an orientation to ensure that all interviews were conducted in the same manner.
- Interview stations were placed at an adequate distance to ensure privacy.
- An informed consent form was read and explained to each subject and then signed prior to the interview.
- There was no section of the form that contained identifiable information of the subjects.
- Upon completion of the interview the health history forms were given to the appropriate faculty member and taken to Pacific University for interpretation.
- Upon completion of the study all surveys were be destroyed.
Results

Demographics (Figure 1)

Health Status
- Health Poor/Fair
- Health Good/Excellent

Ethnicity
- White/None Hispanic
- Hispanic
- Other Ethnic

Age
- Age 18-40
- Age > 40

Legend:
- Health Status
- Ethnicity
- Age
Phys. Exam/BMI/Exercise (Figure 2)

Sleep (Figure 3)
Knocked Out
Chronic HA
Hearing Difficulties
Allergies
Bleeding Gums

HENMT (Figure 4)
Cardiopulmonary (Figure 7)

- Cardiac Hx
- Murmur/- Breath. Difficulty
- Tach/+ Prod. Cough
- Ashtma
- EKG/+ Hemoptysis

- EKG/+ Ashtma
- + Chest+/ Hemoptysis
- + Tach/+ Prod. Cough
- - Murmur/- Breath. Difficulty
- Cardiac Hx

Cardio
Pulmonary
Sexual Hx (Figure 8)

- Never Use
- Prostitute
- Unknown
- Known
- > 5
- 2 to 5
- 1
- 12-16 Yrs.

STD's (Figure 9)

- Chlamydia/Gonorrhea
- Herpes
- Syphilis
- Condom Use
- Partners in Last Year
- Familiarity
- Age of Onset
Cancer Screening (Figure 10)

- Holding
- Starting
- Stream
- Dribbling
- TSE Taught
- TSE Not Taught

Communicable Diseases (Figure 11)

- Confirmed
- TB Screening
- HIV/AIDS
- Hepatitis
- PPD < 1 Yr.
- CXR < 1 Yr.
Abuse (Figure 14)

- Age of Onset
- Offender
- Type

- 10-15 Yrs.
- 5-10 Yrs.
- Before 5
- Neighbor
- Sibling
- Parent
- Sexual
- Physical
- Mental

0 10 20 30 40
Discussion

- **Interesting findings of this study:**
  - Subjects were in line with national averages of BMI. Is due to poor diet or lack of exercise and could it be improved upon with simple changes?
  - Of the 29% of inmates who reported chronic headaches could it be solved with a simple eye exam of which 42% reported having not received in greater than 5 years or never.
  - 34% of inmates reported bleeding gums while brushing, an early sign of gum disease. Would providing an oral cleaning and exam prevent this and possibly vascular disease in the future?
  - Very few of the inmates were screened for communicable diseases such as Hepatitis and HIV/AIDS though most were screened for TB.
  - Greater than ½ of the inmates had been instructed in the TSE.
  - Greater than 60% reported sleep abnormalities, more than 40% reported depression or anxiety. Are there more with mood disorders that are undiagnosed?
  - With the high incidence of abuse (substance, mental, physical, and sexual) very few had been offered or ever received counseling.
Limitations

- Number of volunteers (89) may not have been an adequate sample size.
- Had to assume the information we received was accurate as we had no way to verify it.
- The general nature of the questions of the health history survey made for broad assumptions on the investigators part.
- Limited time of the students to conduct the interviews due to other commitments in regards to academic careers.
Recommendations

- More detailed questionnaire to focus in the findings of the research especially in regards to cardiovascular health, specific drug use, and mental health.
- Look for greater correlation between abuse and all of the other variables.
- Look at putting together a cooperative team with the Pacific University College of Health Sciences, Washington County Public Health and Virginia Garcia to provide expanded health care to this population to include:
  - Physical Exam by the Physician Assistant program
  - Vision screening by the College of Optometry
  - Dental cleaning by the Dental Science Program
  - Counseling by the College of Professional Psychology
References