

FOURTH HEALTH DISPARITIES CONFERENCE

MARCH 27-29, 2011 - NEW ORLEANS, LOUISIANA



XAVIER UNIVERSITY'S COLLEGE OF PHARMACY

**Center for Minority Health
& Health Disparities**
RESEARCH AND EDUCATION

Break Out B

Models that Work:

Multidisciplinary Partnerships for Improved Patient Care



Utilizing Interdisciplinary Strategies to Advance from Disparity to Reform

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ORTHOPEDIC FRACTURE OUTCOMES AMONG PSYCHIATRIC PATIENTS: COUNTY VS. NON-COUNTY HOSPITALS

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David Geffen School of Medicine at UCLA



Utilizing Interdisciplinary Strategies to Advance from Disparity to Reform

Orthopedic fractures in patients with Psychiatric diagnosis undergoing surgery have worse outcomes than non-Psychiatric in county and public providers.

Presenter/PI: David Ruiz. M.S III

MD class of 2012



*Mentors: Bazargan-Hejazi S, PhD; Bernardez J, MD;
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Department of Orthopedic Surgery
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I have nothing to disclose...

OBJECTIVES

- ▶ *Identify a disparity in healthcare*
- ▶ *Describe research findings*
- ▶ *Discuss implications*
- ▶ *Steps toward improvement*

BACKGROUND



Medicine the Art

social-cultural

behavior

scientific

economic

psychological

In 2008, health care's GDP rose to 16.2%. With California's health spending still outpaced the economy (Wilson et al)

Outcomes Peri/Post-op



re-operation



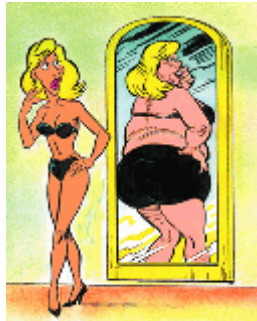
length of stay



rate of infection

Psychiatric patients (Honigman et al.)

Associated with worse outcomes (Kratz et al)



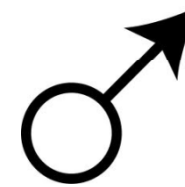
Dysmorphophobia

Younger

Personality
Disorder



Male



Anxiety

Depression



Typical Healthcare Student



PURPOSE

- ▶ To compare the differences in rate of infections, re-operations, and length of stay (LOS), among psychiatric patients who were scheduled for open reduction and internal fixation surgery in county hospitals vs. non-county hospitals.

METHODS

Study design: This is a retrospective analysis of California Hospital Discharge Data for the period 2000–2008.

Inclusion Criteria:

- all ethnicities
- insurance via Medicare/medical, Indigent, Self Pay or Private
- male and female genders
- 18 years of age and older
- hospitalized for fracture or dislocation (ICD–9: 820.0) during 2000–08
- musculoskeletal injuries: upper and lower extremity fractures and dislocations (ICD–9 820.0) with procedures involving open and closed reduction and surgical site infections
- history of psychiatric illness based on ICD–9 codes
 - Schizophrenia (S); 295.0
 - Episodic Mood Disorder (EMD); 296.0
 - Anxiety Disorder (AD); 300.0
 - Depressive Disorders (DD); 311.0

Exclusion Criteria:

- patients outside 2000–08
- under the age of 18
- diagnosed with any skull or rib fractures

Measurements:

- length of hospital stay
- rate of re–infection
- re–operation

Statistical analysis:

- SPSS version 15
- Descriptive
- Bivariate/Chi–square test
- Multiple logistic Regression
- $P \leq 0.05$ & OR, 95% CI

RESULTS

Outcomes in the total sample size including psych pt compared to outcomes in only the Psych population		
	N (%)	Psych
Total	469145	52122
Infection	5046 (1.08%)	787 (1.51%)
Re-operation	152072 (32.41%)	15588 (29.91%)
Admitted to County hospital	44293 (9.44%)	2063 (3.96%)

RESULTS

All Psych patients Private versus County Hospitals (n=52,122) Chi squared 2 variable.			
	Rate of infection	Length of stay \geq 4 days	Re-Operation
Private Hospitals	1.47%	68.88%	29.54%
County Hospitals	2.38%	67.14%	38.78%
P_value	0.001	0.0939	<0.0001

RESULTS

Independent predictors of increased ROF, RO and shorter LOS:

1. Hospitalization in non-county Hospitals
2. Male
3. Black, Hispanic, or Asian
4. <65 years compared
5. Medicare/medical, having indigent status, or self-pay

CONCLUSION

Our data identified significant differences in post-operative outcome measures for patients with different psychiatric diagnoses. In addition, there are differences in surgery outcomes when comparing county versus private hospitals.

Implications based on literature

Controlled psychiatric disease (Nickinson et al)



This may aid in (Sood et al)

Appropriate
Rx/Dx



Morbidity & Mortality

TREAT AS A WHOLE

Latino and African American (Barros et al)

Schizophrenia prevalence is apparently similar across all ethnicities, but blacks are overrepresented in the country's in-patient settings (Kee et al)

In whites, Clinical depression and anxiety >diagnosed, Rx w/evidence-based guidelines and anti-depressants and anxiolytics (Raj et al) (Malek et al)

To improve in the mental health outcomes

- ▶ Shared decision making (SDM)
 - ▶ Example: compliance to scheduled visits and treatment improved for minority patients in community mental health clinics. Also in depressed patients, SDM was associated with a higher probability guideline-concordant care and recovering from depression over an 18-month period. (Patel et al)
- ▶ Also, brief questionnaires developed for use in primary care settings (e.g., the Primary Care Evaluation of Mental Disorders, or PRIME-MD) (Honigman et al)

Acknowledgement

I would like to thank all of my mentors for their excellent guidance, wisdom and inspiration.

Thank You!!!



Main References

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Questions?

Comments?

Concerns?

Thank you!!!

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MODEL FOR SUSTAINING A RURAL COMMUNITY HEALTH PROMOTION INITIATIVE

Anthony U. Emekalam, PharmD, RPh

Elizabeth City State University / UNC Chapel Hill
Doctor of Pharmacy Program



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Thank you for your participation!



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