

Race, Ethnicity and Gender in Pain Assessment and Treatment

(Pain/Ethnic Minority and Multicultural Health SIGS)

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Race, Ethnicity and Gender in Pain Assessment and Treatment

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Overview

- ❑ The prevalence of chronic pain continues to rise in the United States causing individual suffering and contributing to morbidity, mortality and disability and burgeoning economic and societal costs.
- ❑ It has been estimated that over 100 million Americans suffer from chronic pain (Tsang, 2008).
- ❑ A recent Institute of Medicine report (IOM 2011) estimated the annual cost of chronic pain in the United States to be \$560 to over \$600 billion including the cost of healthcare (\$261-300 billion) and lost productivity (\$297-336 billion).

Chronic Pain-Consequences

- ❑ Untreated or mismanaged pain can lead to adverse effects such as delays in healing, changes in the central nervous system (neuroplasticity), chronic stress, depression, suicide and opioid addiction

McCaffery & Pasero 1999

Fishbain 1999

Mendell & Sahenk 2003

Martell et al 2007

Cheatle 2011

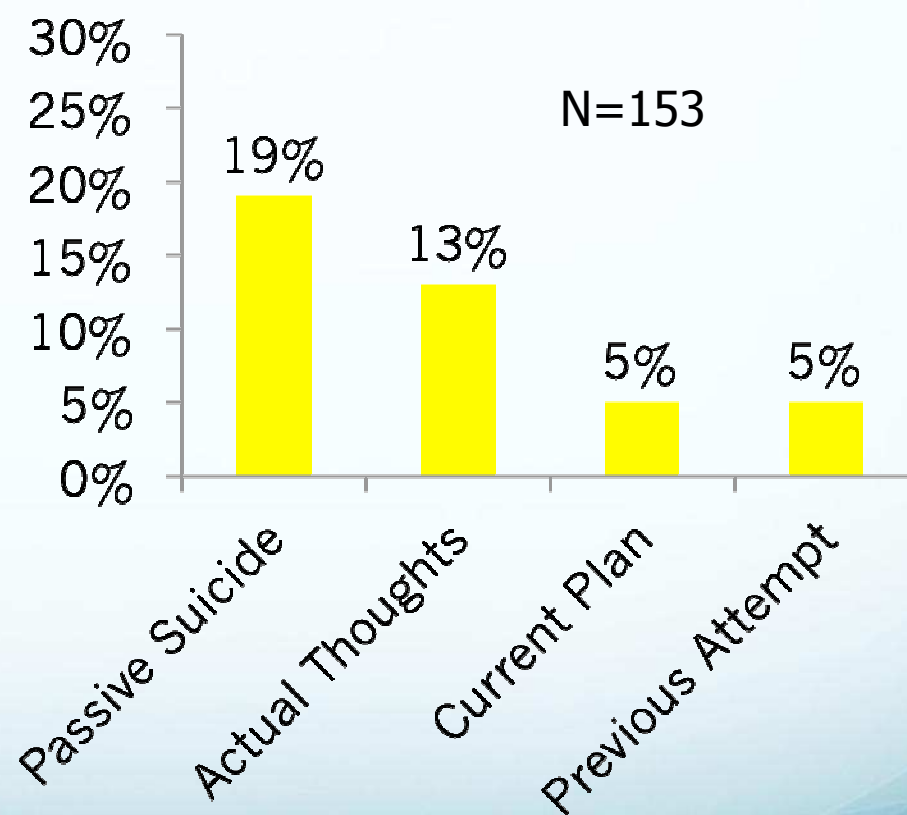
Pain and Suicide



Suicide Ideation in Chronic Pain Patients

- Hitchcock¹
 - 50% chronic pain pts had suicidal thoughts due to pain
- Fishabain²
 - Pain severity
 - Severe comorbidity (depression)

Planned Drug Overdose

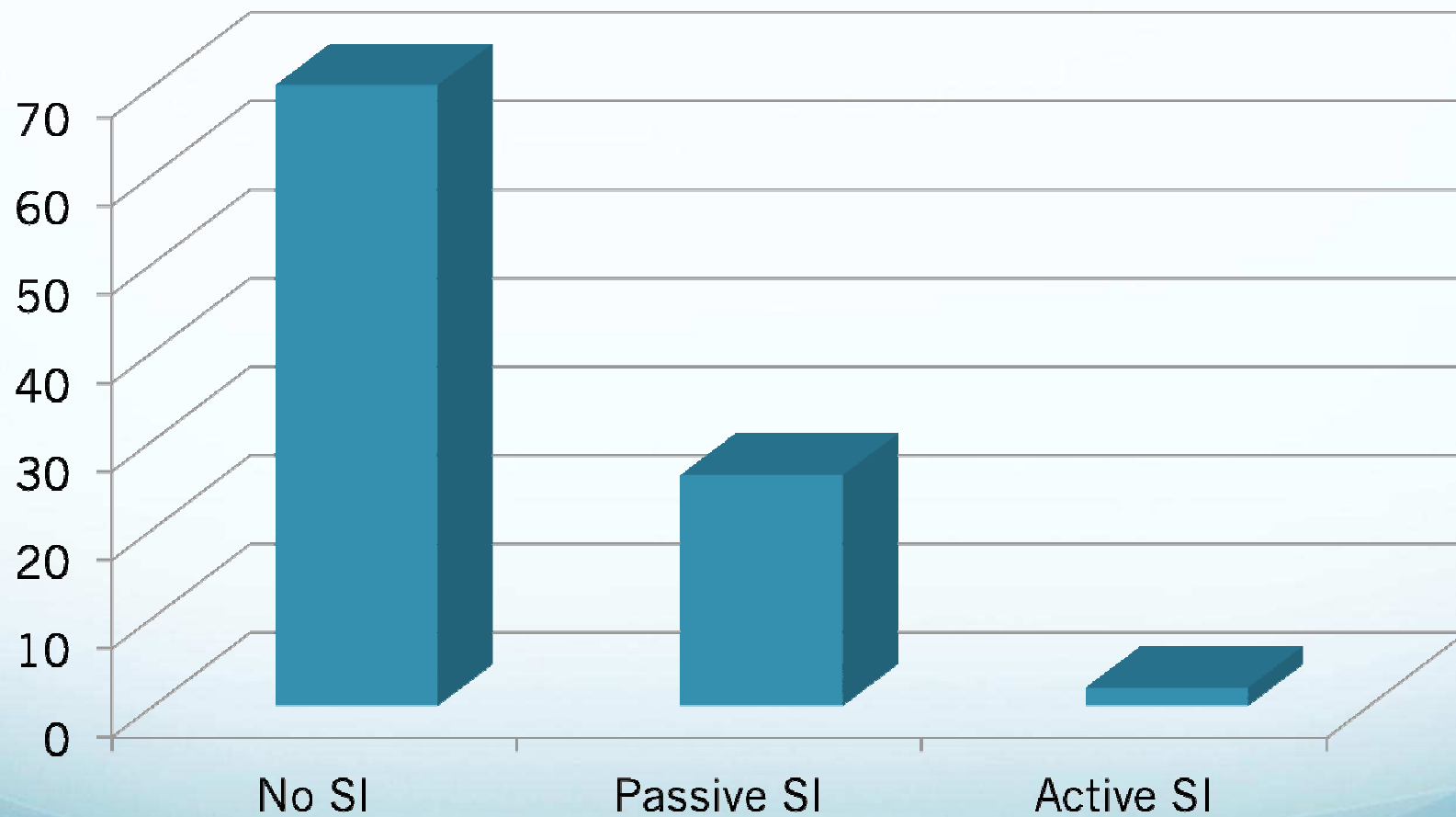


¹Hitchcock LS, Ferrell BR, McCaffery M. The experience of chronic nonmalignant pain. J Pain Symptom Manage 1994;9(5):213-8.

²Fishbain DA. The association of chronic pain and suicide. Semin Clin Neuropsychiatry 1999;4(3):221-7.

³Smith MT, Edwards RR, Robinson RC, Dworkin RH. Suicidal ideation, plans and attempts in chronic pain patients: Factors associated with increased risk. Pain 2004;111(1-2):201-8.

Percentage of patients endorsing SI (n=450)



Overview

- ❑ The 2011 IOM report on pain outlined the following principles:
 - effective pain management is a “moral imperative”
 - pain should be considered a disease with distinct pathology
 - there is a need for interdisciplinary treatment approaches

Institute of Medicine. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Washinton, DC: National Academy of Science; 2011.

2011 IOM Report

- Identified subpopulations with disproportionate burdens that will benefit most from future interventions

IOM Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare 2001

- In 1999 Congress requested that the IOM evaluate the extent of racial and ethnic disparities in healthcare with the assumption that access-related factors were equal
- The IOM study committee reviewed over 100 studies that assessed the quality of healthcare for various racial and ethnic minority groups holding constant variations in insurance status, patient income and other access-related factors
- The majority of research findings indicated that minorities are less likely than whites to receive needed services including clinically necessary procedures and that these disparities exist in a number of disease areas including cancer, cardiovascular disease, HIV-AIDS, diabetes, mental health and pain.

Sources of Healthcare Disparities, IOM 2001:

Factors related to healthcare system operation

- Cultural or linguistic barriers (example: lack of interpretation services for patients with limited English proficiency)
- Fragmentation of healthcare systems (example: minorities are disproportionately enrolled in lower cost health plans that place greater per-patient limits on healthcare expenditures and available services)
- Location where minorities tend to receive care (minorities are less likely to have access to a private physician's office even when insured at the same level as whites)

Sources of Healthcare Disparities IOM 2001:

Factors related to clinical encounter

- Clinical Uncertainty (any degree of uncertainty a physician may have relative to the condition of a patient can contribute to disparities in treatment)
- Beliefs or stereotypes held by the provider about the behavior or health of minorities
- Medical decisions under time pressure with limited information
- Patient response: mistrust and refusal

Disparities in Pain

The background of the slide features a series of overlapping, wavy, horizontal bands in various shades of blue and teal. The colors transition from a very light, almost white-blue at the top to a deeper teal at the bottom, creating a sense of depth and movement.

Inequitable Pain Care

- Systematic reviews demonstrate qualitative differences in pain treatment among racial and ethnic minorities
- Geographic inaccessibility of analgesics in minority neighborhoods (Green CR et al 2005; Morrison RS et al 2000)
- Unfair WC for pain-related claims for racial and ethnic minorities (Chibnali JT et al 2005, 2006; Tait RC et al 2004)

Pain and Ethnicity in the United States: A Systematic Review

Alexie Cintron & Sean Morrison, *Journal of Palliative Medicine*, vol. 9, no. 6, 2006

- A systematic review was conducted using the Medline search with the terms of ethnic groups, minority groups, pain, analgesia and analgesics included
- Results identified 35 journal articles describing the effect of patient race and ethnicity on pain assessment and management
- Three studies on pain assessment revealed that minority patients are more likely to have their pain underestimated by providers and less likely to have pain scores documented in the medical record compared to whites
- 11 of 17 studies found that African-Americans and Hispanics are less likely to receive opioid analgesics and more likely to have their pain untreated compared to white patients
- 3 studies revealed that minority patients are more likely to have a negative pain management index (under treated pain) compared to whites
- Patient-related, provider-related and pharmacy-related barriers to effective treatment management were identified

The authors concluded that the majority of studies revealed that racial and ethnic disparities affect access to effective pain treatment

Racial Differences in Opioid Use for Chronic Non-malignant Pain

Ian Chen, James Kurz, et al, 2005

- Cross-sectional survey administered to patients with chronic non-malignant pain and their treating physicians at 12 academic centers
- 463 patients with non-malignant pain were enrolled
- Analysis of 397 black and white patients showed that blacks had significantly higher pain scores (6.7 / 10) compared to white patients (5.6 / 10)
- White patients were more likely to be taking opioid analgesics compared with blacks (45.7% vs. 32.2% $p > .006$)
- After controlling for confounding variables white patients were significantly more likely (odd ratios 2.67 to 4.15) to be taking opioid analgesics compared to black patients
- There were no differences by race in the use of other treatment modalities such as physical therapy and non-steroidal anti-inflammatories or the use of specialty referrals

Authors conclude that equal treatment by race occurs in non-opioid related therapies but white patients are more likely than black patients to be treated with opioids

Pain Management in the ED

- In 1993 a retrospective cohort study of the emergency room revealed that Hispanics with isolated humerus, radius, ulna, femoral shaft, tibia and fibula fractures were twice as likely as whites to receive no pain medication during their emergency visit

Todd et al, 1993

- A retrospective cohort study of patients with acute, isolated long-bone fractures in an ED in Atlanta, 127 African-Americans and 90 whites received analgesics in 57% and 74% of cases respectively (estimated 1.66 relative risk of receiving no analgesics for African-Americans when compared to whites)

Todd et al, 2000

“The emergency room used to be the worst part of my going to the hospital; the nurses didn’t understand, the doctors didn’t understand, they do all this questioning.

They wanted to know why the medication was not working? Why are you still in pain? If you are crying, why are you crying; if you are not crying, how can you be in pain? If you are laughing or talking it is mental.

You are not only experiencing your pain – the crisis you are going through – you are experiencing other people’s opinions and feelings; that makes it worse.

Dealing with your crisis and dealing with someone else who comes into your room to tell you that you can do this or if you are not doing that something else is wrong. It’s better for them to keep their opinions to themselves and just treat you”

-Patient with sickle cell disease

Future Research

1. Exploring more detailed patient level moderators (cultural beliefs, decision making , preferences) for racial and ethnic minority pain patients
2. Research on the interaction of gender, economic factors, language, level of acculturation, and family and health support systems affecting the quality of care in minorities experiencing chronic pain
3. Development of pain assessment measures that are culturally and linguistically sensitive
4. Understanding clinical decision making, stereotyping, bias, and variability
5. Research on understanding healthcare settings and systems as well as legal and insurance systems affecting treatment of minorities
6. NIH support for interdisciplinary approaches that integrate basic, clinical and health service research methodologies that can be translated into interventions to improve quality of care for racial and ethnic minority patients
7. Increasing the percentage of racial and ethnic minorities in biomedical research

Race, Ethnicity and Gender in Pain Assessment and Treatment

- ◆ Contextual Considerations in the Assessment of Chronic Pain

Francisco Sotelo, BA SDSU/UCSD

- ◆ Considerations in the Treatment of Chronic Pain with Latino and African American adults in Primary Care Settings

Luz Garcini, MA & Elechia Morrison, MA

- ◆ Qualitative assessment of pain in non-muscle-invasive bladder cancer survivors

Heather Goltz, PhD, LMSW