

Racial and Ethnic Disparities in PTSD Treatment: Findings from a National Cohort Study

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Co-Investigators

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Topics to be covered

- Definition of a healthcare disparity
- Results of 3 analyses of a longitudinal cohort study examining disparities in the treatment of PTSD.
- Next Steps and Clinical Implications

Poll Question 1:

What is your primary role in VA?

- Student, trainee, resident, or fellow
- Clinician
- Researcher
- Administrator or Policy-maker
- Other

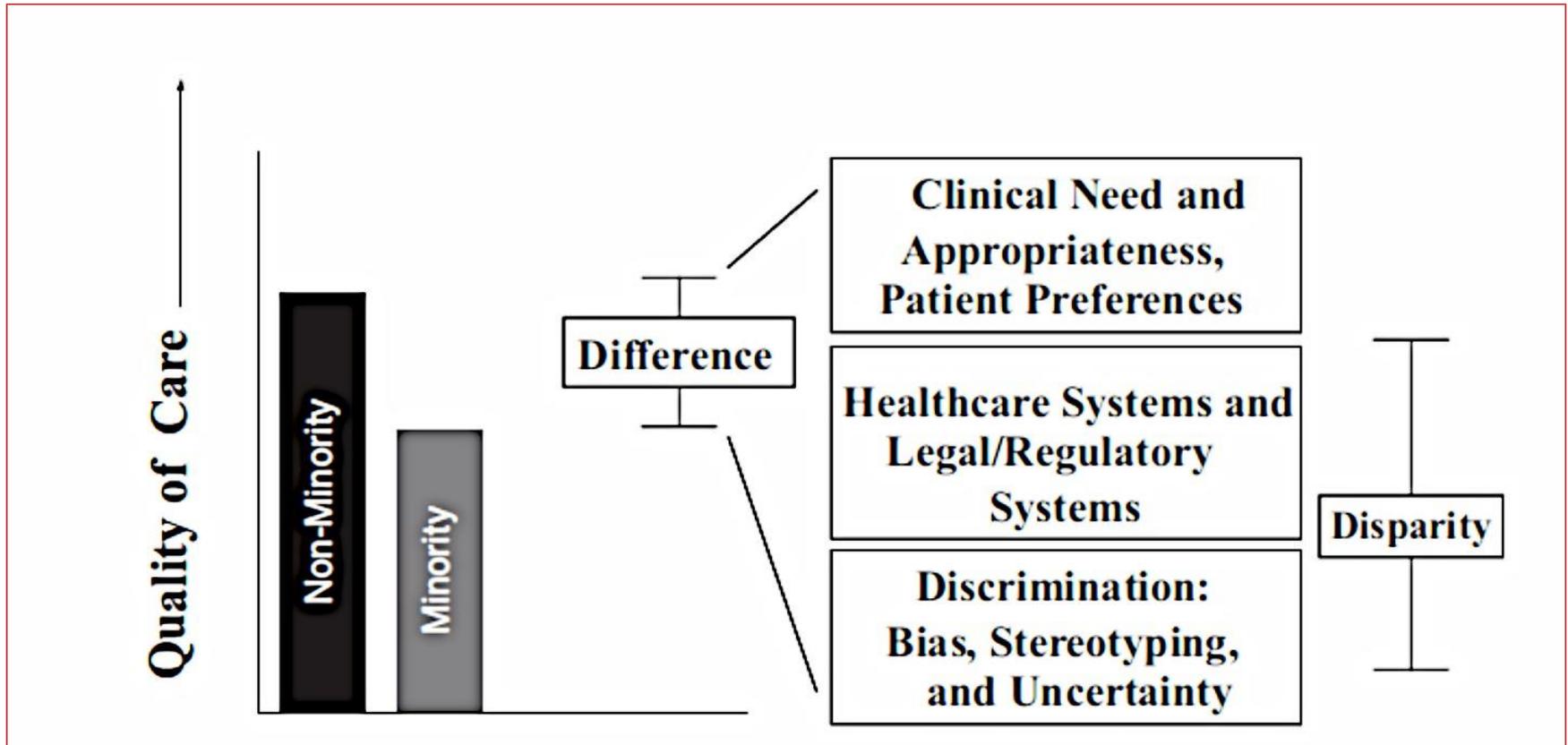
Definitions

- **Health Disparity:** When people of a minority group have poorer physical and/or mental health than the population majority group.
- **Healthcare Disparity:** When people of a minority group receive fewer or lower quality healthcare services than the population majority group.

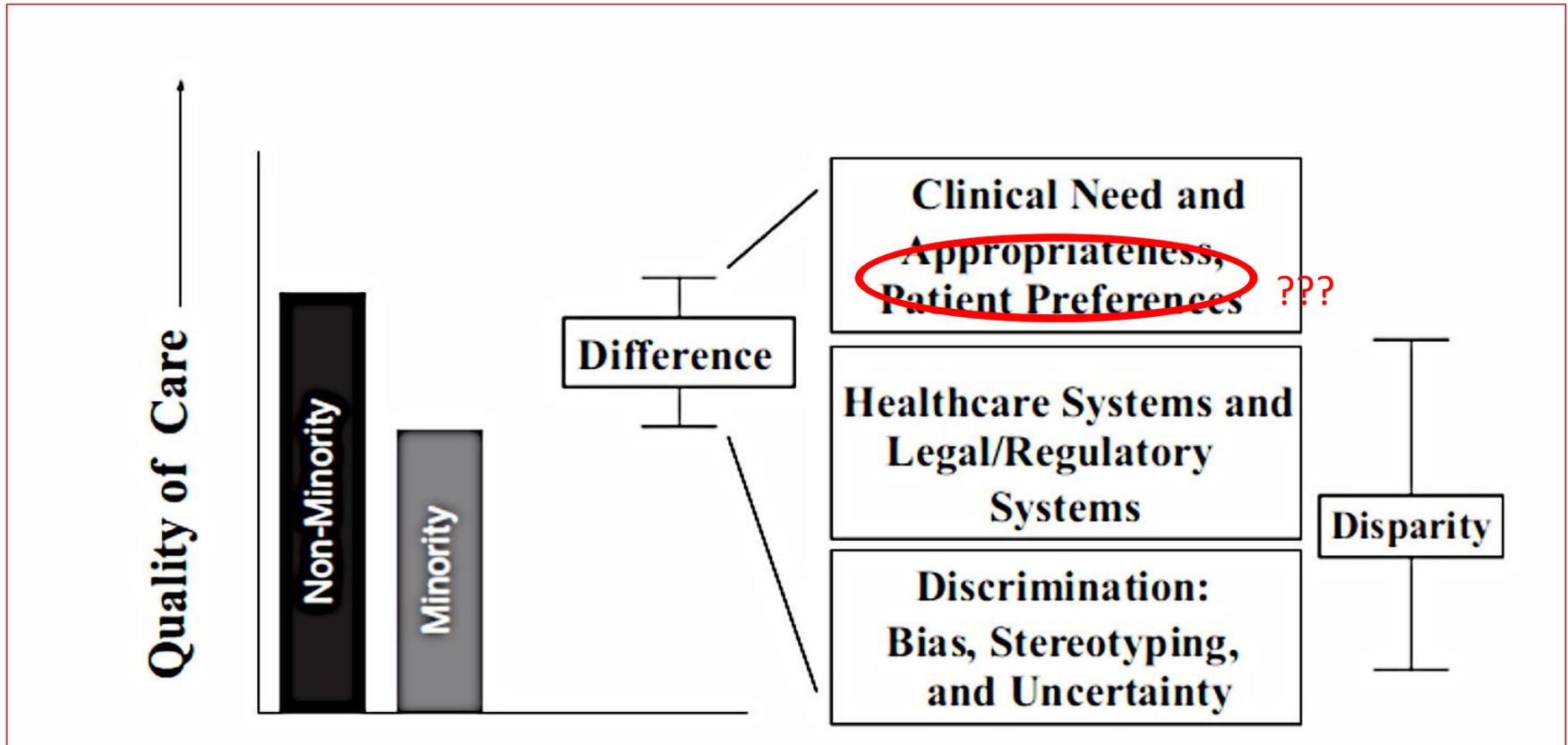
Defining a Healthcare Disparity

- **IOM:** A healthcare disparity is the difference in the quality of healthcare received by minority vs. non-minority patients that is not due to differences in treatment need or patient preferences.

Defining a Healthcare Disparity



Defining a Healthcare Disparity



Defining a Healthcare Disparity

- **IOM:** A healthcare disparity is the difference in the quality of healthcare received by minority vs. non-minority patients that is not due to differences in treatment need or preferences...

... if the patient holds those preferences with full knowledge and understanding of treatment options available.

Decision to Seek Help

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graph TD; A[Decision to Seek Help] --> B[Access to Mental Healthcare]; B --> C[Intake Evaluation]; C --> D[Treatment Referral and Initiation]; D --> E[Ongoing Treatment Management]; E --> F[Minimal Trial of Treatment(s)];
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Access to Mental Healthcare

Intake Evaluation

Treatment Referral and Initiation

Ongoing Treatment Management

Minimal Trial of Treatment(s)

Study 1

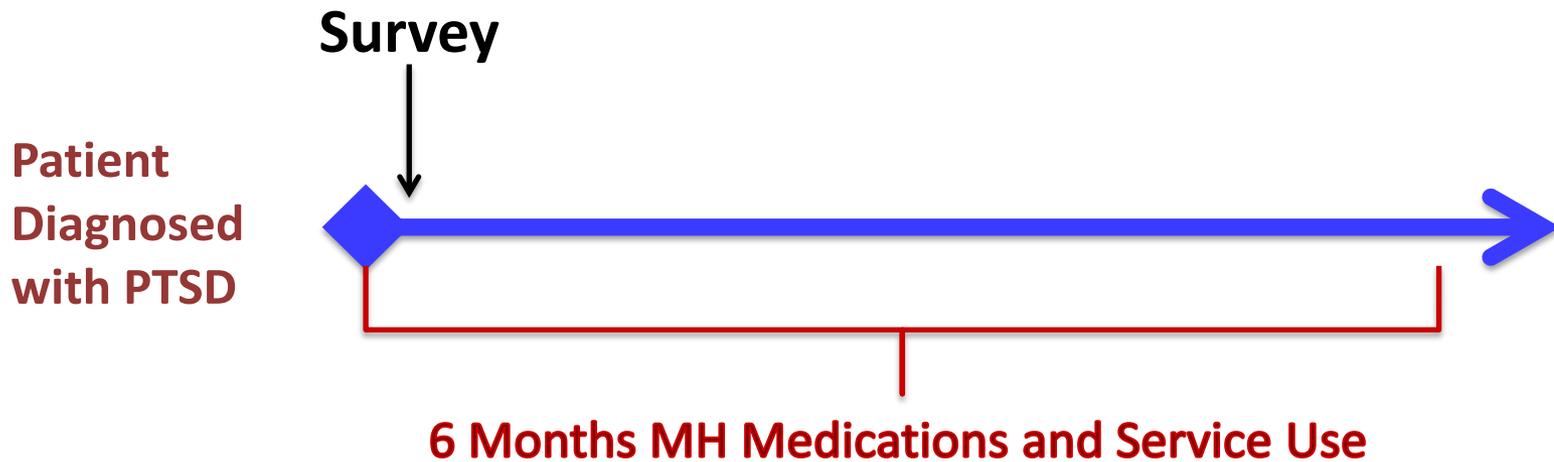
Are there Racial and/or Ethnic
Disparities in Receipt of a Minimal
Trial of Treatment for PTSD?

Depression and Anxiety 2015; 32: 415-25

National Cohort Study

- **AIM:** To determine what factors are associated with receipt of a minimal trial of mental health treatment for Veterans with PTSD.
- **SAMPLE:** Diagnosed with PTSD by VA clinician and were at the beginning of a possible episode of care.
- **Exclusions:** Severe cognitive and schizophrenic spectrum disorders, no mailing address.

Study Design



- ☑ Therapy appointments
- ☑ Psychiatric medications dispensed

Self-Report (check all that apply)

- Whites: Non-Hispanic Whites
- African American: African American only
- Hawaiian/Pacific Islanders: Pacific Islanders and/or native Hawaiian.
- Asian: Asian only
- Hispanic/Latino: Hispanic or Latino ethnicity only
 - Most (80%) did not endorse a separate race category.
- Native Americans: Native American or Alaskan only
- Latino/White: Endorsed both Latino *and* White race
- Native Americans/White: Endorsed both Native American *and* White race
 - **95% of Respondents were Classified**

Sample Race/Ethnicity

White	3,000 (44%)
Native American	369 (5%)
African American	1,318 (19%)
Asian American	167 (3%)
Hispanic or Latino	1,358 (20%)
Hawaiian/Pacific Islander	147 (2%)
Native American and White	284 (4%)
Hispanic and White	135 (2%)

Total

6,778

Outcomes

1. Minimal Trial of Psychotherapy

✧ at least 8 Sessions

2. Minimal Trial of Pharmacotherapy

✧ at least 4 months Rx's

3. Minimal Trial of either Psychotherapy or Pharmacotherapy

Rates of Treatment Receipt

	Survey Sample n% (n=7,645)	Population N% (N= 104,946)
Any psychotherapy	n=2,972 40%	N=40,483 38.6%
Any Antidepressants	n=2,703 36%	N=40,467 38.6%
Any treatment (antidepressants or therapy)	n=4,192 55%	N=57,839 55.1%
At least 8 therapy sessions	n=632 8%	N=7,631 7.3%
At least 4 months of antidepressants	n=1,361 18%	N=20,813 19.8%
Minimum any treatment	n=1,779 23%	N=25,445 24.2%

Explanatory Variable Blocks

Age

Gender

Race/Ethnicity

PTSD Symptoms

**Perceived Need
for Care**

**vSF-12
(MCS, PCS)**

1

Drive time to VA

Clinic Type

OIF/OEF status

**VA disability
status (SC)**

**Household
income**

**Anticipated
Access Barriers**

2

**Beliefs about
Psychotherapy**

**Beliefs about
Antidepressants
for PTSD**

**Beliefs about
Medications**

3

Minimum Medication Trial

	All Factors but Beliefs OR (95% CI)	Including Treatment Beliefs OR (95% CI)
White	Reference	Reference
Native American/Alaskan	0.85(0.59,1.22)	0.89 (0.62,1.28)
African American	<u>0.66(0.54,0.81)**</u>	<u>0.76 (0.62,0.95)*</u>
Asian American	1.19(0.74,1.93)	1.35 (0.82,2.23)
Hispanic or Latino	<u>0.75(0.61,0.93)*</u>	<u>0.85 (0.68,1.05)</u>
Hawaiian/Pacific Islander	0.50(0.23,1.05)	0.66 (0.31,1.38)
Native American and White	0.85(0.59,1.25)	0.89 (0.62,1.28)
Latino and White	0.76(0.45,1.29)	0.77 (0.45,1.32)

Minimum Psychotherapy Trial

	All Factors but Beliefs OR (95% CI)	Including Treatment Beliefs OR (95% CI)
White	Reference	Reference
Native American	0.85(0.51,1.43)	0.83(0.50,1.40)
African American	0.85(0.64,1.13)	0.83(0.62,1.10)
Asian American	0.88(0.41,1.92)	0.91(0.42,1.98)
Latino	1.17(0.88,1.55)	1.15(0.87,1.52)
Hawaiian/Pacific Islander	1.01(0.39,2.63)	1.01(0.40,2.56)
Native American and White	1.23(0.78,1.96)	1.23(0.76,1.97)
Latino and White	1.36(0.71,2.60)	1.32(0.70,2.49)

Minimal Trial either Modality

	All Factors but Beliefs OR (95% CI)	Including Treatment Beliefs OR (95% CI)
White	Reference	Reference
Native American	0.85(0.61,1.19)	0.86(0.62,1.21)
African American	0.71(0.59,0.86)*	0.78(0.64,0.94)*
Asian American	0.97(0.62,1.51)	1.06(0.68,1.59)
Hispanic or Latino	0.83(0.69,1.01)	0.91(0.75,1.10)
Hawaiian/Pacific Islander	0.60(0.32,1.21)	0.74(0.40,1.36)
Native American and White	0.97(0.70,1.35)	0.98(0.71,1.36)
Latino and White	0.98(0.62,1.54)	0.99(0.62,1.59)

Sensitivity Analyses

- Differences in timing of pharmacotherapy initiation.
- Differences in the number of medications changes.

Conclusions and Caveats

- African American and Latino Veterans are less likely to get a minimal trial of pharmacotherapy for PTSD.

Differences between groups within the same facility.

- African Americans had lower odds of receiving a minimal trial of any treatment.

No compensatory increase in psychotherapy.

- For Latino Veterans, treatment beliefs are contributory.

Uncertain if this reflects a true preference or not.

- Disparity may also exist for smaller demographic groups (e.g., Hawaiian/PIs) but we were underpowered.

Conclusions and Caveats

- Do not know about non-VA sources of care.
 - But, Minority Veterans and those with PTSD and more likely to get treatment from VA
 - Disparity may be underestimated.
- Do not know quality of services.
 - May be that discontinuation due to different or lower quality treatments.
 - Disparity could be underestimated.
- Could not look at race/ethnicity X gender in the sample.

Some Previous VA Research

- [Rosenheck \(1995\)](#): More African American Veterans terminated PTSD treatment than White Veterans – unless the provider was also African American.



Study 2

A Closer Look at Psychotherapy:

Who gets individual vs. group
psychotherapy?

Co-Investigators: David Nelson, Shannon Kehle-Forbes, Laura
Meis

Rationale

- Psychotherapy Outcome for Study 1 combined both individual and group psychotherapy.
- Individual Psychotherapy is more resource intensive than Group Psychotherapy.
- There is an insufficient number of therapists to provide individual psychotherapy to all patients with PTSD.
- Therefore, determinations are made as to who is most “appropriate” for this service (informal triage).

And...

- Cook (2014): For evidence based PTSD psychotherapies, providers make determinations about patient “appropriateness”—perceived motivation, cognitive ability and psychiatric comorbidity – none of which may be directly assessed.
- Clinical contexts that are more ambiguous are more likely to evidence healthcare disparities (Dovidio & Fiske, 2012).

Research Questions

- **Question 1:** Are there racial and/or ethnic disparities in the odds of receiving any individual (vs. only group) therapy?
- **Question 2:** If there are disparities, are they occurring within facilities, between them, or both?

Psychotherapy Modality Study

Outcome: Receipt of any individual psychotherapy

Sample: Combined 'Latino/White' with 'Latino'; 'Native American/White' with 'Native American'

Explanatory Factor Blocks:

1. Demographics
2. Treatment need
3. Access factors, MH vs. Primary care clinic, VISN

Ethnicity X Clinic Type Interaction

Odds of Any Individual Psychotherapy

	Demographics + Treatment need	Add Access Factors	Add VISN
Latino	0.62 (0.41,0.94)*	0.60 (0.39,0.91)*	0.81 (0.47,1.37)
Native American	1.51 (0.81,2.83)	1.48 (0.78,2.79)	1.77 (0.92,3.40)
African American	0.48 (0.33,0.71)**	0.48 (0.33,0.69)**	0.67 (0.46,0.97)*
Asian/PI	0.55 (0.28,1.07)#	0.52 (0.24,1.11)#	0.89 (0.37,2.14)
White	Reference	Reference	Reference

** p<0.01 *p<0.05 #p<0.1.

Odds of Individual Therapy in MH Clinics

	Demographics + Treatment need	Add Access Factors	Add VISN
Latino	0.62 (0.41,0.94)*	0.60 (0.39,0.91)*	0.81 (0.47,1.37)
Native American	1.51 (0.81,2.83)	1.48 (0.78,2.79)	1.77 (0.92,3.40)
African American	0.48 (0.33,0.71)**	0.48 (0.33,0.69)**	0.67 (0.46,0.97)*
Asian/PI	0.55 (0.28,1.07)#	0.52 (0.24,1.11)#	0.89 (0.37,2.14)
White	Reference	Reference	Reference

** p<0.01 *p<0.05 #p<0.1.

Primary Care Clinics

- No difference across racial or ethnic groups in the odds of individual psychotherapy in primary care clinics...but low rates for all.

Odds of Therapy any Modality in MH Clinics

	Demographics + Treatment need	Add Access Factors	Add VISN
Latino	0.73 (0.55,0.97)*	0.73 (0.55,0.96)*	0.76 (0.57,1.02)#
Native American	0.98 (0.66,1.45)	0.98 (0.66,1.46)	0.99 (0.67,1.47)
African American	0.88 (0.70,1.12)	0.86 (0.68,1.10)	0.91 (0.70,1.17)
Asian/PI	0.73 (0.45, 1.18)	0.72 (0.45, 1.17)	0.83 (0.50,1.37)
White	Reference	Reference	Reference

** p<0.01 *p<0.05 #p<0.1.

Conclusions and Caveats

- Veterans of minority race and ethnicity are less likely than Whites to receive any individual (vs. only group) psychotherapy.
 - For African Americans, due to both within and between facility factors.
- This disparity occurs in mental health clinics, not primary care.
- Latinos are less likely than Whites to receive therapy of any modality in VA mental health clinics.
 - Due to both within- and between-facility factors; between-facility factors are greater.
- Do not know the quality of either individual or group treatments offered.
- Do not know why these disparities occur.
 - Provider factors must be a component



Some Previous Research

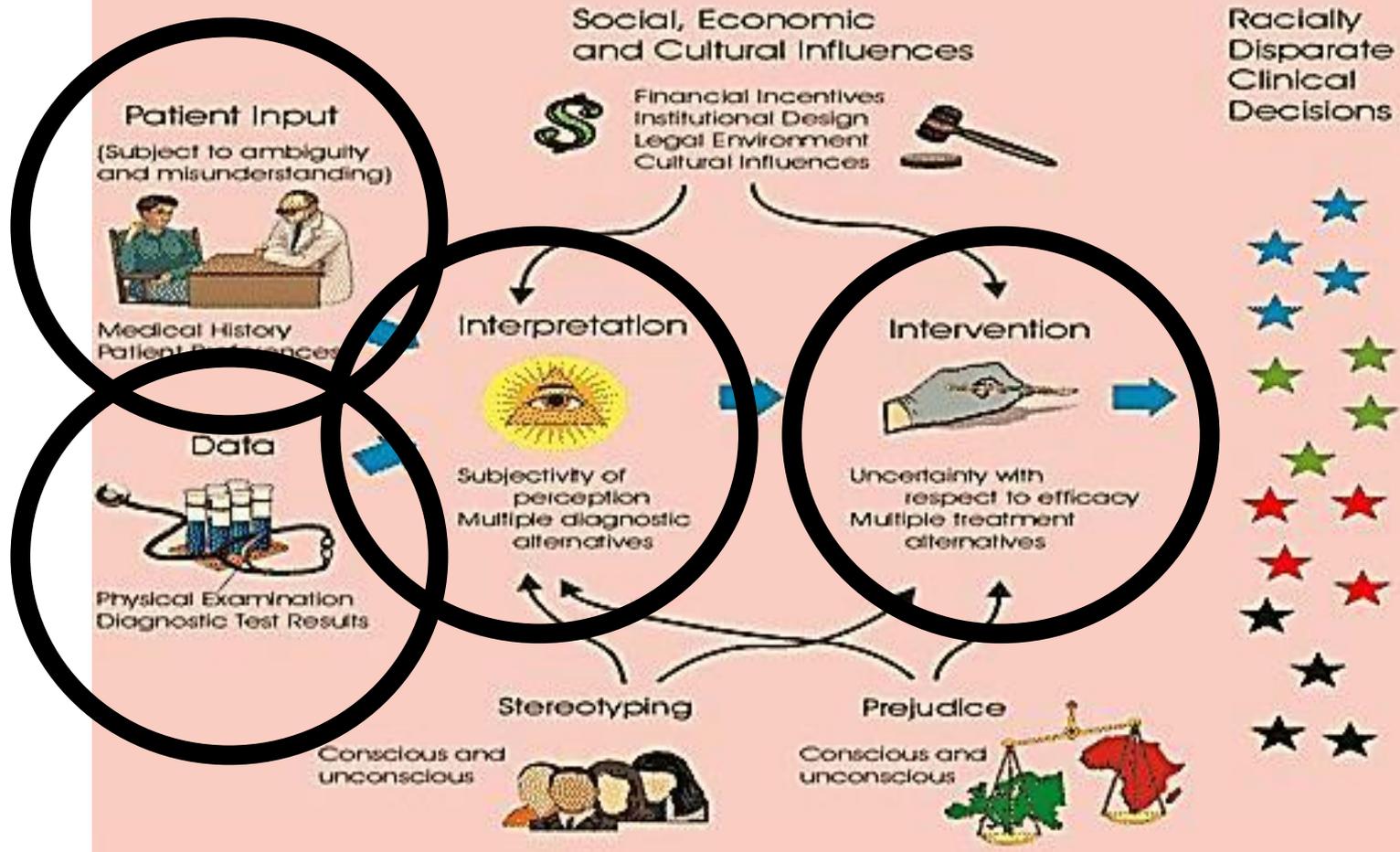
- **Mott (2014)** : Regional study found that minority Veterans were less likely to get individual vs. group psychotherapy.
- **Hunt & Rosenheck (2011)**: Across MH diagnoses, African Americans were--
 - 17% less likely than Whites to get any therapy
 - 25% less likely to get individual psychotherapy
 - If have group therapy, get fewer sessions

Preferences Not Contributory

- African American Veterans more likely than Whites to:
 - Perceive a need for care
 - Want trauma focused therapy (or any other therapy)
 - Hold more positive beliefs about the potential benefit of psychotherapy (also true for Latino Veterans).

Clinical Discretion

As exercised by clinical caretakers, gatekeeper physicians, and Managed Care Organization UM's



Study 3

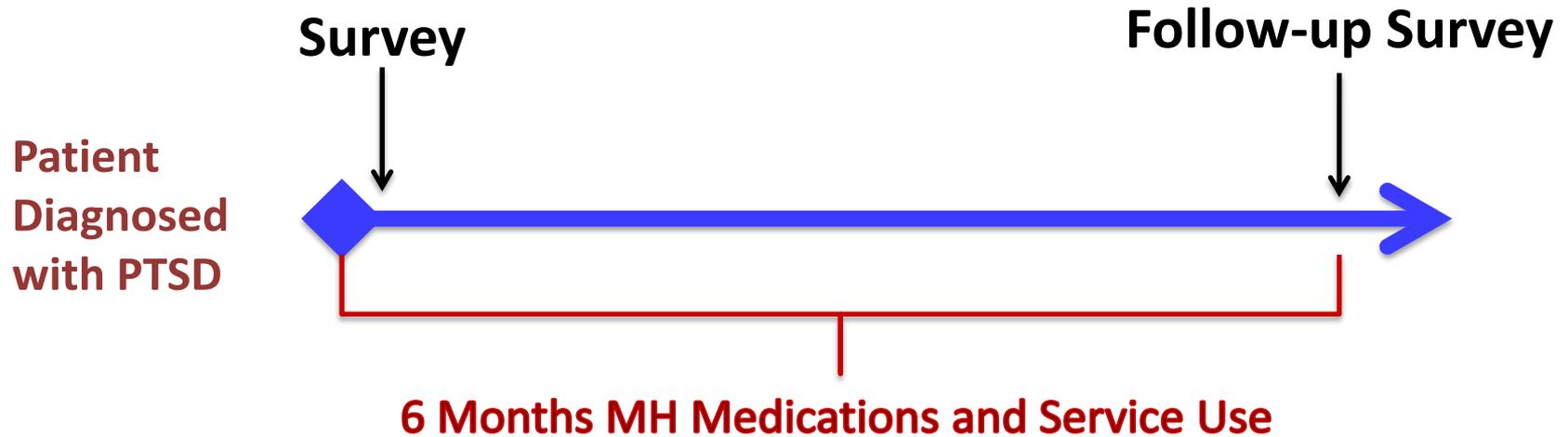
What aspects of patient-provider relationship are associated with receipt of a minimal trial of treatment?

--Preliminary Findings--

Co-Investigators:

David Nelson, Margarita Alegria, Michelle van Ryn

Study Design



Patient
Diagnosed
with PTSD

Survey

Follow-up Survey

6 Months MH Medications and Service Use

- ☑ Therapy appointments
- ☑ Psychiatric medications dispensed

Modeling Pharmacotherapy Retention

- **Sample:** Those African American, Latino and White Veterans who initiated pharmacotherapy and responded to follow-up survey
- **Follow-up survey:** Medication Provider Ratings (expertise, interpersonal communication), Degree of medication side-effect distress.
 - Controlling for baseline measures.
- **Outcome:** Minimum trial of Pharmacotherapy

Poll Question 2: How different do you think the ratings of medication providers are across racial/ethnic groups of Veterans?

1. Completely different
2. Very different
3. Somewhat different
4. No different

	Whites (n=803) n (%)	African American (n=412) n (%)	Latino (n=398) n (%)
Side Effect Distress			
None	261 (36) ^a	84 (23) ^b	85 (44) ^b
A little, but went away	119 (16)	72 (20)	75 (21)
A little, but stayed	131 (18)	66 (18)	67 (19)
Moderate to severe distress	218 (30) ^a	145 (40) ^b	133 (37) ^b
Antidepressant Beliefs			
... are addictive	357 (48) ^a	219 (59) ^b	219 (59) ^b
... are effective	585 (78) ^a	265 (69) ^b	282 (75) ^{a,b}
... make you feel drugged	365 (48) ^a	260 (68) ^b	231 (60) ^c
... make you back to normal	562 (74) ^a	223 (58) ^b	225 (59) ^b
... just cover up problems	430 (56) ^a	237 (61) ^{a,b}	239 (62) ^b

Med Provider (MP) Ratings	Whites (n=803) n (%)	African American (n=412) n (%)	Latino (n=398) n (%)
I can talk about personal things with MP.	545 (73)	287 (76)	269 (73)
MP knows how to treat problems like mine.	564 (77)	282 (78)	273 (76)
I don't always feel comfortable asking MP questions.	339 (45) ^a	145 (39) ^b	155 (43) ^{a,b}
Sometimes MP doesn't listen.	147 (20)	58 (16)	61 (17)
MP gives me control of my treatment.	563 (76)	264 (73)	265 (74)
MP understands how I feel.	498 (67)	249 (68)	251 (70)
MP cares about me.	561 (76)	287 (79)	288 (80)
I am concerned what MP puts in my chart.	358 (48) ^a	203 (56) ^b	178 (49) ^{a,b}
MP helps with me med side-effects.	602 (83)	293 (82)	298 (85)
MP has not always told me what to expect from treatment.	237 (32)	124 (34)	113 (31)

MINIMUM TRIAL OF MEDICATION

African American	0.30 (0.13, 0.69)**
Latino	0.51 (0.21, 1.20)
White	Reference
Medication Side-effect Distress (<u>Reference</u> : no side-effects)	
A little, but went away	1.29 (0.91, 1.84)
Sometimes	0.79 (0.56, 1.13)
Most always	0.64 (0.47, 0.87)**
MCS (from vSF-12)	0.98 (0.97, 0.99)**
Med provider did not help with side-effects (<u>Reference</u> : Whites who did not get help with Side Effects)	
African Americans did <u>not</u> get Side-Effect help	0.36 (0.16, 0.80)*
Latinos did not get Side-Effect help	1.12 (0.51, 2.50)

Decision to Seek Help



Access to Mental Healthcare



Intake Evaluation



Treatment Referral and Initiation



Ongoing Treatment Management



Minimal Trial of Treatment(s)

Conclusions and Caveats

- African Americans whose Med providers did not help them with side-effects were much less likely to continue treatment. Not so with Whites.
 - This effect was noted even though there were no differences in patients' ratings of whether their providers managed their med side-effects.
 - Not due to differences in the number of appointments with the provider.
 - Must be a result of the clinical interaction.
- Differences between groups do not necessarily contribute to disparities.
- If providers treat all patients the same, disparities may be inadvertently fostered because the care is not patient-centered.

Some of the things we know about MH Treatment Disparities...

- Cultural factors impact symptom presentation and symptom attribution: Earl (2014), Lewis-Fernandez (2009), Marshall (2009)
- Providers assess racial/ethnic minority patients differently: Alegria (2008), Sleath & Rubin (2002), Adams (2014).
- Communication quality with MH providers lower for African Americans, Latinos and leads to lower ratings of care quality and treatment discontinuation: Alegria (2013), Cooper (2012)
- Provider implicit bias affects patient-centeredness of care: Blair (2013), Cooper (2012), Chapman (2013)
- Patient-provider ethnic/racial matching improves communication and retention: Rosenheck (1995), Alegria (2013)

Summary

We found racial and ethnic disparities in:

- Pharmacotherapy retention
- Receipt of individual vs. group psychotherapy and, in the case of Latino Veterans, *any* psychotherapy.
- Management of pharmacotherapy

Summary

- Patients bring different beliefs, expectations, and knowledge to treatment.
 - Provider behavior is interpreted within the context of these differences.
- These disparities likely begin in the intake evaluation and in the process of referring patients to MH.
- Disparities in PTSD treatment are caused by both within- and between-facility factors.

Next Steps

- To address these disparities, we need to understand what factors contribute to them both in the patient-provider interaction and on a systems level (i.e., what are the important within- and between-facility factors)
- The presence of treatment disparities suggest that care is not sufficiently patient-centered.

Clinical implications 1

- There is no evidence that the treatments for PTSD are less effective for those of minority race or ethnicity.
- All clinicians used to assume that patients who used *any* alcohol or drugs should not get psychotherapy until they were completely sober— not supported by the evidence.
- Consider whether there is any evidence to support an assumption of “not appropriate” for a given patient.

Clinical implications 2

- In medicine, we make categorical diagnoses and are encouraged to provide treatments according to clinical practice guidelines.
- Treating all patients the same may contribute to disparities, particularly in mental health care, where patients' symptom expressions are influenced by cultural and familial factors and where treatment may be viewed with much ambivalence.

Questions ? ? ?

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