

CaRE Study

CAnker pain Relief for Everyone

Adherence in African Americans being Treated for Cancer Pain

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NIH/National Institute of Nursing Research

Study Team

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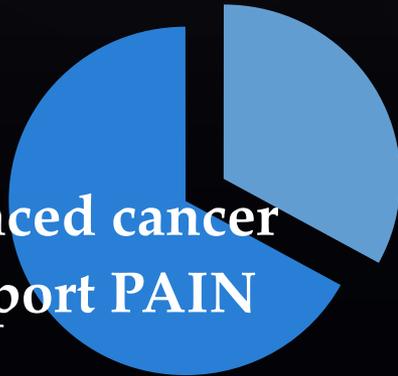
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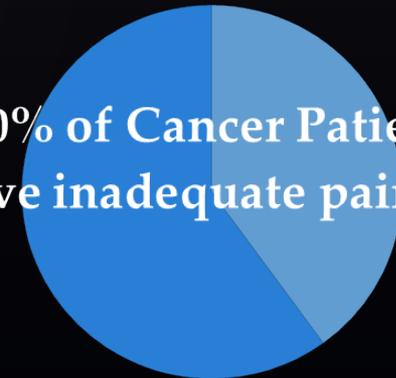
Background



2/3 of advanced cancer patients report PAIN



40% of Cancer Patients receive inadequate pain relief



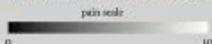
Disparities in Pain Care

Research shows that certain racial/ethnic and socioeconomic groups are more vulnerable to poor pain care and management. This infographic describes some factors that contribute to disparities in pain care.

Bias in Pain Treatment

Across the lifespan and regardless of socioeconomic status, blacks are less likely than whites to receive analgesic medication for pain^{1,3}

Primary care providers are more likely to underestimate pain intensity in blacks than in other sociodemographic groups^{4,4}

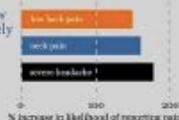


Compared with white patients, black patients were more likely to have:⁵

-  - more referrals for substance abuse assessment
-  - fewer referrals to a pain specialist
-  - increased drug urine tests

Socioeconomic Status

People with incomes below poverty level are more likely to report pain^{4,5}



During ER visits, opioids were prescribed more frequently to patients with the highest socioeconomic status⁶



Language Barriers

Less than 20% of health professionals treating Hispanic pain patients reported Spanish proficiency at an advanced level⁷



Non-native English speakers may have:⁸

-  - limited health literacy
-  - difficulties navigating the healthcare system
-  - difficulties understanding healthcare providers

Access to Care



Pharmacies located in minority neighborhoods are less likely to carry sufficient prescription analgesics than those located in white neighborhoods⁶

Impoverished individuals and minorities are more likely to be uninsured or underinsured than non-minorities and people with greater incomes⁷

Reduced access to health care in general, and specialty care in particular, contributes to pain disparities, with racial and ethnic minorities and the poor having decreased access to care⁸

Learn More...

The above information points to a need for a coordinated, multi-agency approach to pain care and treatment including increased awareness of implicit bias. An NIMH report on reducing pain in America (see reference) called for a comprehensive population health-level strategy for pain, which is currently in progress under the Dept. of Health and Human Services.

Resources for patients with pain:

- Find a doctor
<http://www.finda.doctor.gov/>
- Talking with your doctor
<http://www.nih.gov/characterization/education/infobiosocioeconomic.htm>
- Learn more about chronic pain
<http://www.nih.gov/characterization/education/infobiosocioeconomic.htm>
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<http://www.nih.gov/characterization/education/infobiosocioeconomic.htm>

Resources for care providers:

- Cultural & linguistic competency
<http://www.nih.gov/characterization/education/infobiosocioeconomic.htm>
- Talking with your doctor
<http://www.nih.gov/characterization/education/infobiosocioeconomic.htm>
- Institute of Medicine report on Reducing Pain in America - <http://www.iom.edu>
- Office of Minority Health - Cultural & Linguistic Competency
<http://www.minorityhealth.hhs.gov/omh/press.aspx?hl=060414>

References

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2. Anderson, K.J., C.R. Grilo, and R. Payne. Racial and ethnic disparities in pain: causes and consequences of unequal care. *J Pain*. 2008; 9(12): 1187-203.
3. Aydt, M., et al. The impact of neighborhood socioeconomic status and race on the prescribing of opioids in emergency departments throughout the United States. *J Gen Intern Med*. 2013; 28(2): p. 186-93.
4. Tan, B.C. and J.T. Chahal. Racial/ethnic disparities in the assessment and treatment of pain: professional perspectives. *Acta Psychol*. 2014; 162(1): p. 111-41.
5. Heumann, L.H., et al. Racial disparities in the prescribing of patients in chronic opioid therapy. *Pain*. 2013; 154(1): p. 49-52.
6. Bekasick, S.J., et al. A multi-faceted initiative to improve provider awareness of pain management disparities. *Am J Med Qual*. 2014; 29(1): p. 395-96.
7. Chikand, E., et al. Health care provider perceptions of pain treatment in Hispanic patients. *Pain Pract*. 2014; 14(2): p. 207-77.



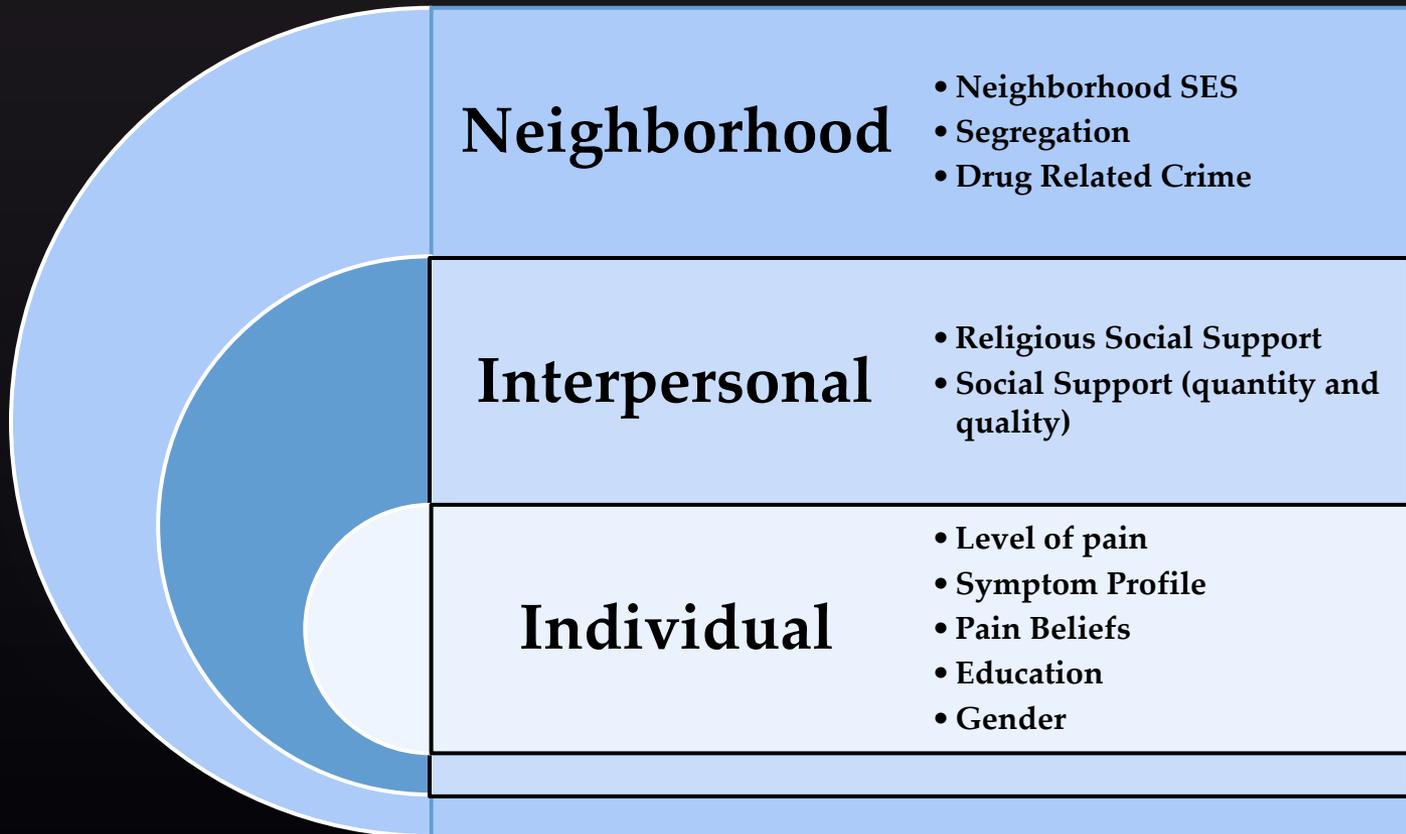
Specific Aims

Aim 1: Examine the influence of individual factors and interpersonal factors on “around the clock” opiate adherence in African Americans being treated for cancer pain.

Aim 2: Determine whether neighborhood factors moderate the relationship between “around the clock” opiate adherence and interpersonal factors in African Americans being treated for cancer.

Aim 3: Using qualitative methods, explore unique interpersonal and neighborhood level concerns and how these concerns affect adherence to “around the clock” opiates from the perspective of the African Americans individual with cancer pain.

Social Ecological Model



Adherence to “around the clock” (ATC) opiates

- 1) Self Report- ACTG Adherence Questionnaire
- 2) Medication Event Monitoring System (MEMSCap™)



Eligibility

Inclusion Criteria

- ❑ 21 years or older
- ❑ African American by self report
- ❑ Lived in US for at least 10 years
- ❑ Cancer Diagnosis
- ❑ In possession of prescription for “Around the clock” Opiate
- ❑ Mentally competent
- ❑ Living at home
- ❑ At current residence for last 6 month
- ❑ Living in the Atlanta metro area (10 county area)

Exclusion Criteria

- ❑ Surgery in last month
- ❑ Using pillbox for opiates

(Recruiting from Oncology and Palliative Care Clinics at 3 hospitals)

Study Procedures

Study contact with participants:

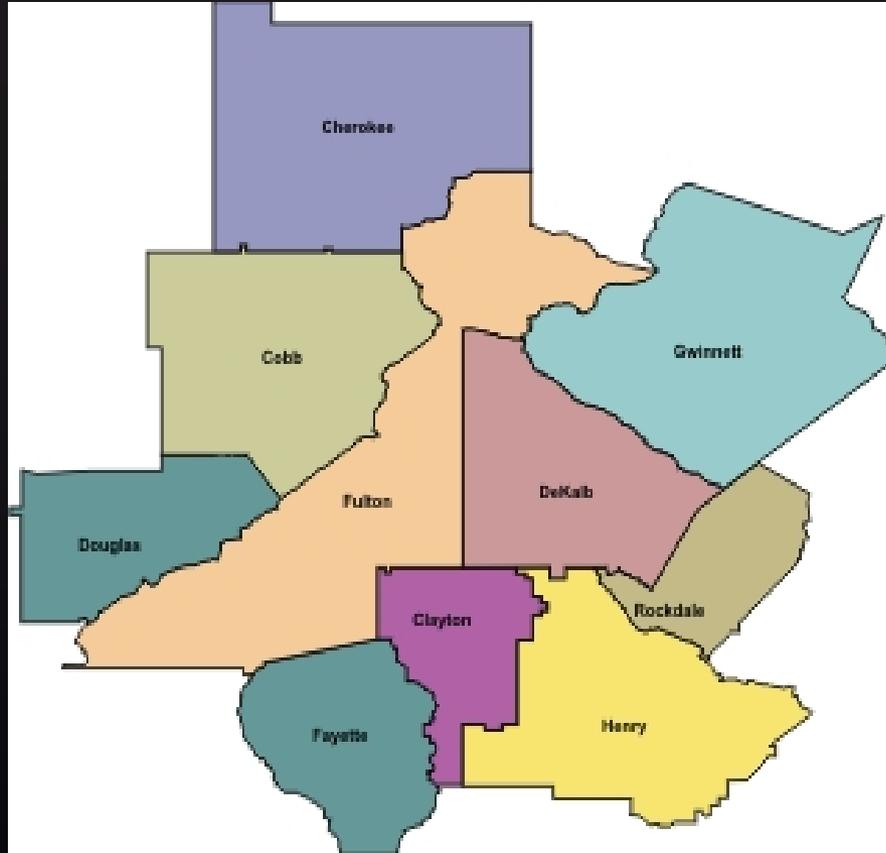
- Screening and consent visit in clinic/hospital
- **Visit 1** at home or clinic—about 1 hour
 - Complete questionnaires
 - **Set up MEMSCap™**
- **Visit 2** at home or clinic - about 10 minutes
 - Complete questionnaires
 - **Collect MEMSCap™**
 - Qualitative interviews with subset of 15

Baseline Visit

- Demographic Form
- Perceptions of **Neighborhood** Safety
- Brief **Pain** Inventory
- **Medication Adherence Questionnaire** (Adapted from ACTG Adherence Questionnaire)
- **Medication List**
- Edmonton **Symptom** Assessment Scale
- Patient Health Questionnaire-8
- **Religious** Attendance & **Support** Questionnaire
- **Barriers** Questionnaire-13
- **Social Support** Form- MSPSS*
- Drug History Form
- PLUS
- **Place MEMSCap™ on ATC Opiate**

Follow-Up Visit

1. Brief **Pain** Inventory
2. **Medication** Adherence Questionnaire
3. **Collect** MEMSCap™



Do *neighborhood* factors affect the relationship between individual or interpersonal factors and ATC opiate adherence?

- 1) **Neighborhood SES** per census tract (Index including % households below 100% poverty line, % head of households who have less than a HS education, % unemployed)
- 2) **Segregation** (Isolation Index for Blacks)
- 3) **Drug related crime rates** (the local density of drug-related arrests within a geographic area during a particular time period).

Demographic Characteristics (n=50)

	n	%
Gender		
Female	26	52
Male	24	48
Marital Status		
Single	6	12
Divorced/separated/Widowed	16	32
Married/ committed relationship	28	56
Education		
Less than high school	9	18
High school graduate	10	20
College/ Some college	24	48
Graduate School	7	14
Age	mean (range) 56 (35-87)	

Brief Pain Inventory (n=50)

	Mean	Range
Severity	4.3	0-8.5
Interference	4.5	0-9.3
Worst	5.8	0-10
Least	3.0	0-10

Symptoms

Edmonton Symptoms Assessment Scale (n=56)

Pain	3.8	0-10
Tiredness	4.1	0-10
Drowsiness	3.1	0-9
Nausea	1.2	0-10
Appetite	2.6	0-10
Shortness of Breath	1.6	0-10
Depression	1.6	0-7
Anxiety	2.1	0-8
Wellbeing	3.3	0-10

Adherence to ATC Opiate

Self Report: Did you Take Medication As Prescribed (n=46)		n	%
	Yes	25	54
	No	21	46
Reports never skipping med (n=50)		16	32

Adherence to ATC Opiate

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Medication Event Monitoring System (MEMSCap™)

MEMS Caps Downloaded	31
Mean Number of Monitored Days /Per son	38.8
Range: Monitored Days	24 - 56
Mean % of Prescribed Doses Taken	53.26%
Range: % of Prescribed Doses Taken	3.3% - 101.4%
Mean % of Prescribed Doses Taken on Schedule	23.65%
Range: % of Prescribed Doses Taken on Schedule	0% - 94.6%

Moving forward

- Continue study enrollment
 - Complete qualitative interviews (n=15)
 - Begin GIS analysis

Questions?



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