

Center for Health Policy & Inequalities Research
AT DUKE UNIVERSITY

HRSA
U.S. Department of Health and Human Services
Health Resources and Services Administration

UNC
SCHOOL OF MEDICINE

DUKE GLOBAL HEALTH INSTITUTE

Guide to Healing

Depression as a barrier to appropriate HIV care among HIV+ women of color - findings from the Guide to Healing Project

Lynne C. Messer, PHD, MPH; E. Byrd Quinlivan, MD; Heather Parnell, MSW; Katya Roytburd, MPH

Presenter Disclosures

<Lynne C. Messer>

(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

< No relationships to disclose >

Guide to Healing (G2H) - project description

- Women of color (WOC) are disproportionately affected by the HIV epidemic in the United States, especially in the U.S. South.
- WOC are at increased risk of infection, mortality and risk of being lost to care.
- The Guide to Healing (G2H) project seeks to enhance the entry, retention, and engagement of HIV-positive WOC into care in the University of North Carolina Infectious Diseases Clinic.

G2H background- depression - HIV

- Lifetime risk estimates for major depression among women range from 20-26%; and among HIV+ women up to 37%
- Trauma and psychological abuse also prevalent, especially among HIV+ individuals (e.g., among women, 68% report sexual assault after age 15 and 34% report childhood physical abuse*)
- Women who are depressed are less likely to engage in appropriate HIV care and adhere to HIV treatment
- In this analysis, we explore the correlates of depression including childhood trauma, ongoing partner psychological abuse, and sociodemographic characteristics and begin exploring possible associations with HIV medication adherence

*Whetten et al., 2008

G2H project description- study area

Percent of People Living with HIV/AIDS
Attending UNC-CH clinic
2005

Legend

- 20-30%
- 30-40%
- 40-50%
- 50-60%
- 60-70%
- 70-80%
- 80-90%
- 90-100%

2008, Quinlivan

G2H project description- UNC ID clinic population

- As of 2009
 - 380 Women of color (81% of all women)
 - Of the 380 WOC, 84% African American
 - Mode of transmission
 - Intravenous drug user = 11% African American; 1% Hispanic
 - Heterosexual transmission: 81% African American; 87% Hispanic

Guide to Healing

G2H methods - data collection

- G2H employs an interrupted time-series evaluation design, which consists of weekly cross-sectional interviews of HIV-positive WOC (average 7 per week) at UNC ID clinic.
- Baseline data were collected from 189 unique interviews with HIV+ WOC at the UNC ID clinic (April 2010 -February 2011). Eligibility criteria: >= 18 years of age, able to communicate in English and be present in the clinic for an appointment with an ID provider.
- Validated instruments measuring depression (PHQ9), trauma (WHO trauma questionnaire), psychological abuse (Index of Psychological Abuse) and sociodemographics (age, education, employment, insurance status) among others.

Guide to Healing

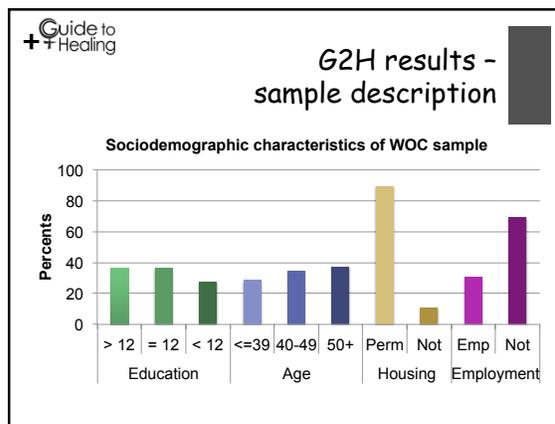
G2H methods - sample questions

- PHQ9**
 - "Thinking about the past two weeks, how often have you been bothered by the following problems" (4-point scale from "not at all" to "nearly every day")
 - Little interest or pleasure in doing things
 - Poor appetite or overeating
- WHO**
 - Answer choices: "never", "once", "more than once"
 - Have you ever been held up or threatened with a weapon?
 - As a child, were you sexually abused (touched you in a sexual way, made you touch them, or forced you have sexual intercourse)?
- IPA**
 - "How often has your partner..." (answer choices "never", "rarely", "sometimes", "often")
 - Accused you of having or wanting other sexual relationships?
 - Lied to you or deliberately misled you?

Guide to Healing

G2H methods - statistical analyses

- Questions were read to participants; responses were recorded into netbook computers.
- Linear regression models generated beta coefficients and 95% confidence intervals for the abuse-related, trauma-related and sociodemographic correlates of depression.
- Models predicting depression as a function of childhood abuse, adult abuse and partner psychological abuse were adjusted for housing, employment, insurance, age and education.



Guide to Healing

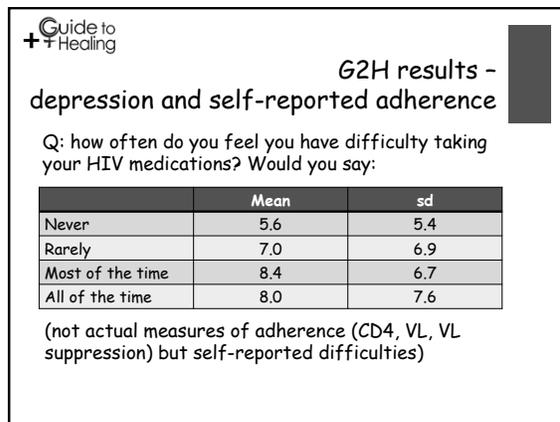
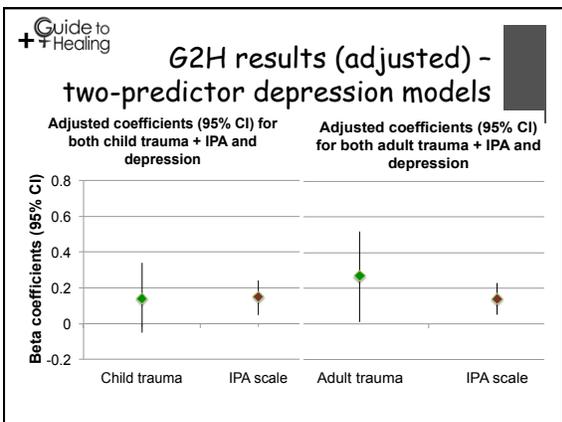
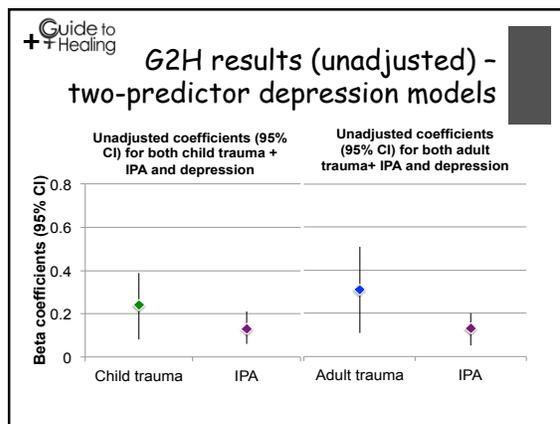
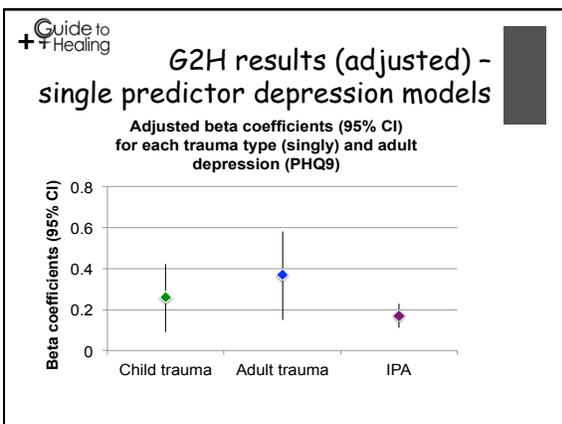
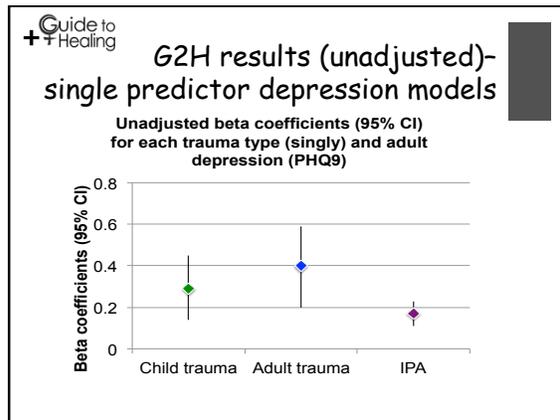
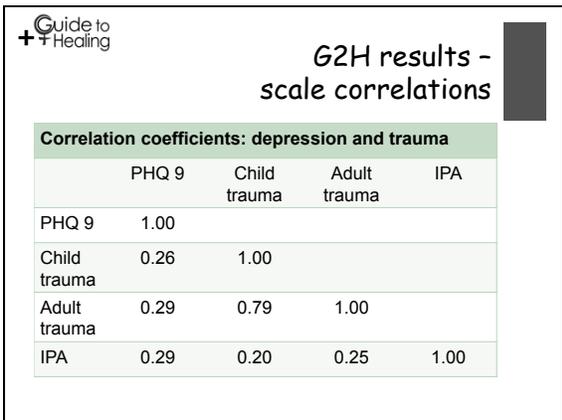
G2H results - scale description

Distribution of depression and trauma			
Variable	Mean	sd	Observed range
PHQ 9	7.11	5.98	0 to 24
Child trauma	19.92	5.41	13 to 38
Adult trauma	16.44	4.29	10 to 28
IPA	32.09	11.18	0 to 63

Guide to Healing

G2H results - categorical depression distribution

Percents of self-reported depression by established cutpoints					
None	Minimal	Mild	Moderate	Mod-Severe	Severe
0	1-4	5-9	10-14	15-19	20+
18.2	26.1	25.0	17.1	10.2	3.4



 **G2H summary - overview of findings**

- Most women reported some level of depressive symptoms on the PHQ 9, with over 30% reporting moderate or more severe depression.
- Childhood trauma, adult trauma and partner psychological abuse were also reported by these HIV+ women of color.
- All three types of trauma were statistically significantly associated with depression in adjusted models.
- In adjusted models with multiple predictors, partner psychological abuse and childhood trauma remained statistically significantly associated with current depression.
- In preliminary analyses, depression appeared associated with self-reported adherence difficulty among these HIV+ WOC.

 **G2H summary - study limitations**

- Only able to interview the women who show up in the clinic; "missing" women may systematically differ- particularly on depression scale- from those on whom we have data
- Cross-sectional data collection; retrospective exposure, contemporaneous exposure and depression data collected at the same time
- Very little information on Hispanic women whose depression experiences / expression may differ in important ways from non-Hispanic black women in sample
- No comparison group for these analyses

 **G2H summary - study strengths**

- Substantial number of women represented in baseline (189 unique interviews represents nearly half of all black non-Hispanic infectious disease patients)
- Used validated and nationally-comparable instruments
- Important heterogeneity (age, years since diagnosis, educational attainment) present in this sample
- Multiple measures on most women allow us to assess longitudinal change

 **G2H summary - future directions**

- Examine depression and trauma with viral load, viral load suppression and CD4 count data (for treatment adherence outcome).
- Explore associations with other social and mental health constructs (e.g., anxiety, social support).
- Examine associations with health behaviors (e.g., substance use, sexual behavior).
- Model temporal sequencing of trauma - depression - adherence using marginal structural models or structural equation modeling.

 **G2H project - acknowledgements**

- **Funders:** This research was supported by funds from Health Resources and Services Administration Special Projects of National Significance Program (HA15148) and University of North Carolina's Center for AIDS Research (P30-A150410).
- **Staff:** We gratefully acknowledge assistance from UNC colleagues Ada Adimora, Lynda Bell, Jonah Pierce, Randi Gordon, Dea Papajorgii, Nancy DeSousa, and clinic staff. We also appreciate the assistance from Duke staff including Donna Safely, Sammy Tcwhenko, Darren Weber, and Kim Walker
- **Participants:** We profoundly appreciate the women who consented to share their stories and responses with us.



 **+**

THANK YOU!
And, any questions?