



# Stigma and the Long-term Trajectory of Depression among Latinos in Primary Care

**William A. Vega, PhD**

Provost Professor and Executive Director  
University of Southern California (USC)

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## Declaration of Conflict of Interest

- **No conflicts**
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## Learning Objectives

- 1) Participants will be able to identify the most critical elements of social and self stigma.
- 2) Participants will learn the effects of stigma on depression treatment outcomes.
- 3) Participants will learn a belief clinical strategy for clinical management of stigma.



## Overview of the Issues

- In 2013, there were 54 million U.S. Latinos and approximately 40% are immigrants. Two-thirds are of Mexican origin.
- U.S. Latinos less likely to receive guideline-based care.
- U.S. Latinos predominantly seek mental health assistance in primary care.
- U.S. Latinos likely to be medication non-adherent and discontinue treatment prematurely.



## Barriers to Effective Treatment

- Poor doctor-patient communication reinforced by language discordance
- Social stigma concerning mental illnesses and self-stigma rooted in self-reliance
- Non-adherence to medications in part due to addiction related stigma associated with using drugs





## Background of the Study

- This study was supported by previous work to develop a stigma measure (The Latino Scale for Antidepressant Stigma-LSAS) based on factor analyses of all major stigma scales in the field derived from interview data with low income Latino primary care patients in Los Angeles who were depressed based on the Patient Health Questionnaire (PHQ) - 9



## Methods

- Sample of 220 patients enrolled, presenting for treatment in primary care and screening positive for depression (PHQ >3), 18+ yrs, and seen in public clinics serving predominantly low income Latino patients
- Sample (screening PHQ>9) was followed from baseline selection(T1) over 3 waves (T2 – T4) of data collection at 6, 25, and 30 month intervals (n= 200 completers)



## Measures and Data Analysis

- Patients received standard clinical care
- PHQ-9 was key repeated outcome measure, range 0-27 possible, caseness threshold is 10
- The Latino Scale for Antidepressant Stigma
- A doctor-patient communication 6-item measure was derived from our previous stigma study (Cronbach coefficient of .80), and predicted 23% lower medication adherence
- Latent variable curve growth modeling (adjusted) using M-Plus used to determine rate of change on depression scores





## Measures and Data Analysis (cont'd)

- Growth modeling was specified for conditional effects of non-adherence, stigma, and doctor-patient communication, and model was adjusted for age, education, gender, and health insurance
- Growth modeling facilitates use of smaller samples to detect a small effect size at a power of .80
- Comparative Fit Index (CFI) of .95
- RMSEA of .06



## Sociodemographic Characteristics of the Sample (N=200)

Variable	<i>n</i>	%
<b>Age</b>		
18-29	7	3.5
30-49	85	42.5
50-64	87	43.5
65 and older	21	10.5
<b>Female</b>	165	82.5
<b>Spanish-language interview</b>	190	95
<b>Education</b>		
Less than high school	121	60.5
Some high school	26	13
High school graduate	31	15.5
Some college	10	5
College graduate or additional higher education	12	6



## Depression Severity, Antidepressant Utilization, Stigma, and DPC Across the Four Time Points (N=200)

Variable	Mean	S.D.
<b>PHQ-9<sup>a</sup></b>		
Baseline (time 1)	13.84	5.60
6 months (time 2)	11.91	6.00
25 months (time 3)	8.90	6.70
30 months (time 4)	9.00	6.70
<b>LSAS<sup>b</sup></b>		
25 months (time 3)	7.60	1.90
30 months (time 4)	7.30	1.90
<b>DPC<sup>c</sup></b>		
6 months (time 2)	0.08	0.25
25 months (time 3)	0.48	0.26
30 months (time 4)	0.51	0.29
	<i>n</i>	%
<b>Depression care utilization</b>		
Currently taking antidepressants (time 1)	45	22.5
Currently taking antidepressants (time 2)	52	26.0
Currently taking antidepressants (time 3)	65.00	33.0
Currently taking antidepressants (time 4)	59.00	30.0



# Depression Outcome Rates Across a 30-month Period

Time period	Probable depression (PHQ-9>9)		Improved/Remission (PHQ9<10)		Maintained improvement/Remission		Relapse/Recurrence (PHQ9 >9)	
	(n=200)		(n=173) <sup>a</sup>		(n=120) <sup>b</sup>		(n=90) <sup>c</sup>	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>Baseline (Time 1)</b>	173	86.5						
<b>6 months (Time 2)</b>	127	63.5	46	26.6	29	63.0	17	37.0
<b>25 months (Time 3)</b>	88	44.0	55	31.8	35	63.6	20	36.4
<b>30 months (Time 4)</b>	89	44.5	19	11.0	-	-	-	-

<sup>a</sup> Figures represent the frequency of participants scoring below probable depression for the first time since baseline, across time periods. The subsample includes the 173 participants with a probable depression at baseline (PHQ-9>9).

<sup>b</sup> Figures represent frequency of participants who were who, after demonstrating improvement/remission, maintained a subthreshold depression score at 30 months, separately by time period. Percentages were calculated based on the number showing improvement/remission during each corresponding time period.

<sup>c</sup> Figures represent frequency of participants who, after demonstrating improvement/remission, experienced relapse/recurrence during one of the subsequent time periods. Percentages were calculated based on the number showing improvement/remission during each corresponding time period.



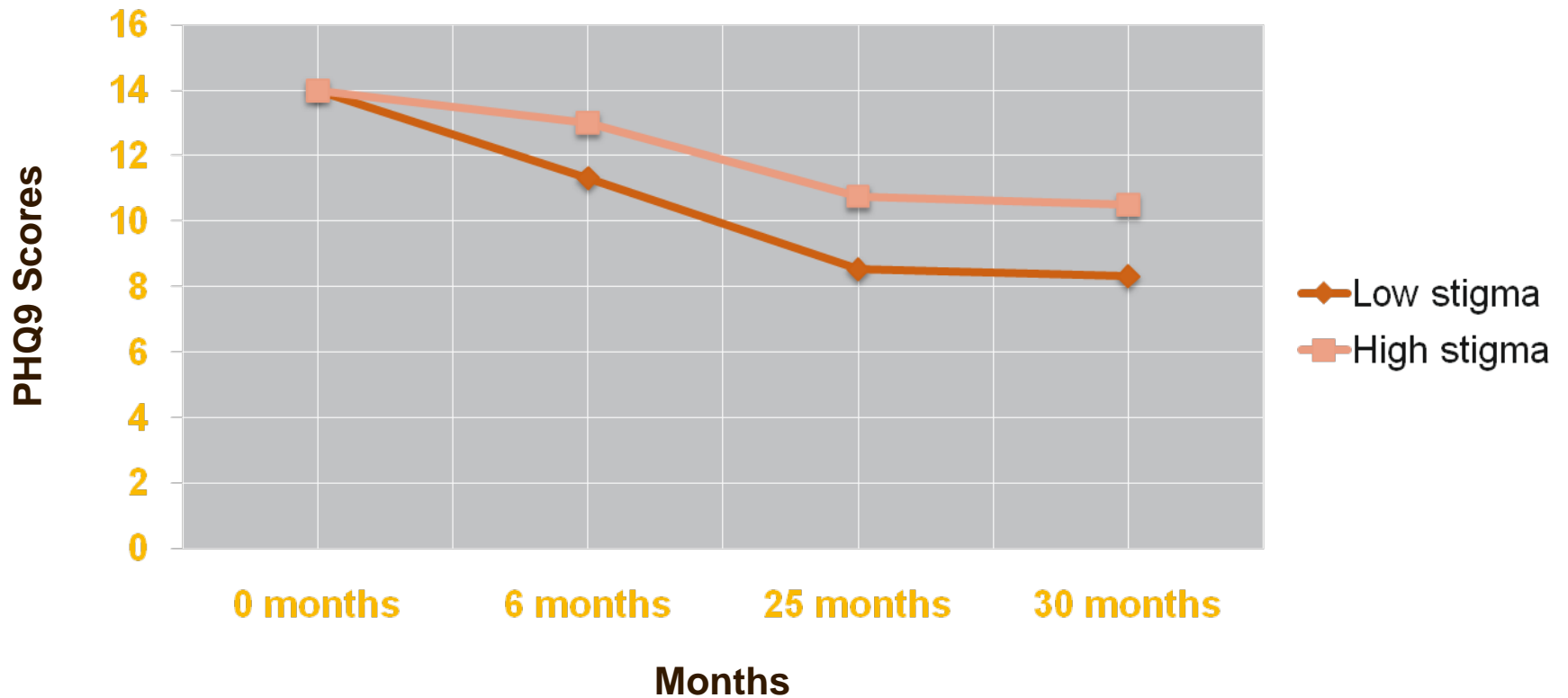
## Latent Trajectory Model of PHQ-9 (Depression) Trajectory over 30 Months

Variables	Coefficient	S.E.
Intercept (Baseline)	13.89	2.01*
Slope (PHQ-9 Trajectory)	-0.35	0.1*
Antidepressant utilization		
Time 1	-0.06	0.03*
Time 2	-0.07	0.03*
Time 3	0	0.08
Time 4	-0.02	0.01*
DPC		
Time 2	-0.11	0.58
Time 3	-0.01	0.06
Time 4	-0.06	0.03*
Antidepressant stigma		
Time 3	0	0.01
Time 4	0.35	0.13*

\* P<.05.



## PHQ-9 Depression Scores Across Time for Patients with High and Low Stigma



**Note:** Lines represent stigma as measured by the LSAS and were dichotomized using a median split.



## Discussion

- Depression severity decreased across time for about two-thirds of the sample
- Predictors independently associated with reduced depression
- Antidepressant stigma has the strongest long term effects on sustained depression status indicating probable depression
- (PHQ >9)



- Depression remits in most patients after two and a half years, but is likely to recur—at 25 months, 55% no longer met probable depression criteria
- 37% relapsed after initial improvement
- Low rates of antidepressant “take-up” likely produced slow treatment effectiveness within first 6 months of care





## Limitations and Implications

- Despite using a longitudinal model our results are correlative analysis and subject to misinterpretation of results in direction of causality
- Further studies of stigma mechanisms are needed to determine how they operate to influence patient behaviors in the context of clinical care
- The effects observed in this study were independent of health insurance



## Summary

The effect of stigma on depression persistence are independent of non-adherence effects

- Antidepressant medication adherence was directly linked to depression outcomes—a need to improve adherence is evident
- Favorable patient communication needs further study to determine how best to improve it, and in turn, improve adherence



# The Stigma of Depression



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## Addressing stigma of depression in Latino primary care patients

William A. Vega, Ph.D.<sup>\*</sup>, Michael A. Rodriguez, M.D., M.P.H., Alfonso Ang, Ph.D.

*Department of Family Medicine, UCLA School of Medicine, Westwood, CA 90024, USA*

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### Abstract

**Objectives:** To develop a validated stigma checklist to assist physicians in addressing depression in Latino patients.

**Method:** Two hundred low-income, Spanish-speaking, Latino patients in primary care clinics were screened for depression using Patient Health Questionnaires (PHQ-2 and PHQ-9), and medical records were reviewed. With the use of a wide pool of stigma items, empirical methods were used to develop a stigma checklist from this primary care sample and patient information was used to demonstrate construct validity.

**Results:** Patients reporting higher levels of perceived stigma using the stigma checklist were less likely to disclose their depression diagnosis to their family and friends ( $P < .05$ ) and also less likely to be taking depression medication (OR=.78; 95% CI, .62–.99). Patients with stigma were less likely to be able to manage their depression (OR=.79; 95% CI, .65–.96) and more likely to have missed scheduled appointment visits (OR=1.44; 95% CI, 1.03–2.02).

**Conclusion:** Given the strong relationship between stigma and care of depression, primary care clinicians should be aware of and address stigma among their depressed Latino patients. The stigma checklist presented for treating Spanish-speaking Latino patients in primary care may be used to assess depressed patients for stigma to help inform clinical management of patients.

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## Stigma Measure

- A stigma checklist was constructed based on factor analytic results of Latino patients' responses to a wide pool of stigma scales derived from the research literature and reduced to seven items based on factor loadings and analysis of internal consistency.
- Excluding items with low inter-item and item-to-total correlation coefficients resulted in a seven-item checklist with an internal consistency measure of 0.69.



## **Clinical Checklist (Rephrased from Questionnaire)**

**People have different opinions about depression and what it means for their life. I'm interested in your feelings about this. Can you tell me whether you:**

- 1) Believe people who take medications for depression have difficulties solving their problems?**
- 2) Believe it would be difficult to spend an evening socializing with someone who is being treated for depression?**
- 3) Believe you would socialize with your neighbor if you knew they were depressed?**
- 4) Believe you could trust a person who was depressed?**
- 5) Are concerned about receiving treatment for depression because people you know will think less of you?**
- 6) Would be concerned that you your family members will think less of you if you are treated for depression?**
- 7) Would be concerned that your friends will think less of you if you are treated for depression?**



## Why is Stigma Clinically Relevant?

- Stigma may represent a barrier to care because depressed patients with stigma may be less inclined to acknowledge their condition and, as a result, may be less likely to seek help. In fact, some depressed patients may avoid treatment out of concern that they may be judged or discriminated against by others.
- Patients exhibiting concern about stigma should be examined more closely.
- Efforts that challenged self-stigma and promote empowerment may improve adherence by engaging patients to be more active in their care.



## Why is Stigma Clinically Relevant? (cont'd)

- Stigma may actually be reinforced by the experience of poor treatment. Previous studies have found that stigma is negatively associated with antidepressant drug adherence, intent to not accept diagnosis of depression, decreased desire for mental health treatment among depressed immigrant women, greater unmet health care needs, diagnosis and management of depression.





## Why is Stigma Clinically Relevant? (cont'd)

- As most depressed patients seek treatment in primary care settings, and these patients are frequently undertreated, it is important to identify ways to increase the effectiveness of primary care clinicians in managing depression.
- Interventions need to consider the context of the primary care setting and consider barriers to treatment including lack of adequate time, training, competing agendas, and lack of adequate reimbursement.





“Every system is perfectly designed to achieve exactly the results it gets.”

**-Donald Berwick**

