Psychometric properties of the barrier assessment tool for under-utilization of mental health services among Korean Americans

\_\_\_\_\_\_

Kunsook Bernstein, PhD, RN, PMHNP-BC, Associate Professor, School of Nursing Hunter College, City University of New York

**Acknowledgments:** 

The project was funded by Clinical Translation Science Center, Weill-Cornell Medical College/National Institutes of Health

# Overview of the Literature

- Researchers report that despite the high prevalence of mental illness among Asian Americans (Rakesh, Bailey, & Maletic, 2008), they are less likely than general population to utilize mental health services (Lee, Hanner, Cho, Han, & Kim, 2008; Leong & Lau, 2001).
- Western-style psychotherapy which often emphasizes self-disclosure and emotional expression may contrast with Asian preferences of help such as getting help from family or friends and resources (i.e., oriental herb or acupuncture), and their cultural beliefs (Lee, et al., 2008; Leong & Lau, 2001 ; Sue, 1994; Uba, 1994).
- Most of the quantitative studies published in English targeting not only Asian Americans but also other ethnic population, used a self developed instrument and many qualitative studies have conducted to identify the barriers through focus groups or semi structured interviews.

## **Problem Statements**

- Studies report that there is a high prevalence of mental illness among Asian Americans.
- Despite the high prevalence of mental illness among Asian Americans, they tend to underutilize mental health services.
- There has been no well tested barrier assessment instrument to measure barriers for Asian American immigrants' under-utilization of mental health services.

# Purpose of the Study

- Evaluate psychometric properties of the mental health service barrier assessment instrument (MHSBA) instrument for Korean Americans developed by the current research group.
- Measure the correlation between depression and barrier scores.
- Determine most frequently selected individual barrier items/reasons in the MHSBA instrument.

# Research Design



- \* Korean Americans in NY, NJ, Philadelphia
- \* 256 subjects were participated in the study.

#### Instruments

- \* Korean version of Patient Health Questionnaire (PHQ-9)
- Mental Health Service Barrier Assessment (MHSBA)22- item scale

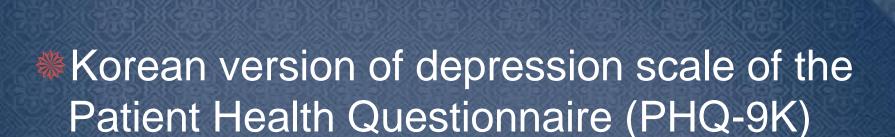
#### \* Data collection

\* Self-reported survey from January 2010 and June 2010

# Sample criteria

- Korean American
- Age 18 or older
- \* Read and write Korean fluently
- No serious cognitive impairment
- Willing to participate in the study
- \* Able to transport her/himself to the study location

### Measurements



Mental Health Service Barrier Assessment (MHSBA) scale

#### Mental Health Service Barrier Assessment Questionnaires

- Q1. I do not know where or how to get help for these problems.
- Q2. It's too difficult to find Korean speaking psychiatrist or counselor.
- Q3. Arranging transportation to the clinic is difficult.
- Q4. I have no time to get help for this kind of problem.
- Q5. Making an appointment with mental health specialist is difficult.
- Q6. I have no health insurance.
- Q7. The cost of treatment is too expensive.
- Q8. I (or my family member) do not believe that these problems can be mental illness.
- Q9. I believe that this kind of problem is part of life.
- Q10. I do not believe that the illness is not serious enough to get help.
- Q11. I feel ashamed over having a mental illness.
- Q12. I do not want to worry my family.
- Q13. Family and friends can be more helpful than mental health specialist.

  Q14. Mental health counseling is only for the crazy people.
- Q15. Therapy does not help these problems.
- Q16. Medication does not help these problems.
- Q17. I am afraid that I may get addicted to medicine.
- Q18. Oriental medicine is better than Western medicine/counseling.
- Q19. I can't trust the mental health professionals to keep my problems secret.
- Q20. Even mental health specialists really don't understand my problems.
  - 21. I prefer to see a family doctor rather than mental health specialist
- Q21. I prefer to see a family doctor rather than mental health specialist.

  Q22. It's difficult to talk about my feelings.

#### Translation and Back-Translation

- The Mental Health Service Barrier Assessment (MHSBA) scale was translated into Korean by a doctoral-level bilingual researcher of Korean American Scholar, and then back translated into English by another doctoral-level bilingual researcher.
- Content discrepancies were discussed with a third bilingual researcher until semantic equivalence was reached.
- These three bilingual researchers also verified the relevance of these two scales to Korean culture after all translations were completed.

# Data Collection

- Data were collected by three researchers from various Korean community such as;
  - **\***Churches
  - \*Buddhist temples
  - **\***Senior center
  - \*Korean community center
  - \*Mental Health OPD at the local hospital
  - \*\*Local business agencies

# Data Analysis

- 225 survey data were analyzed (31 survey were excluded).
- All analyses were conducted by SAS 9.2.
- Internal consistency reliability of the MHSBA tool was assessed by Cronbach alpha
- Exploratory factor analysis was conducted to identify and characterize the potential clusters of correlated items.
- Qualitative clinical judgment was utilized in order to understand mea ningful factor patterns in addition to quantitative criteria (e.g., prioritizing the items with factor loading above 0.5)
- Pearson correlation coefficient was computed for the depression and the barrier scores

Descriptive Statistics, Item-total Correlation, and Cronbach's Alpha for MHSBA Item Level Values (N=225*)						
Barrier tool questions	Mean (SD)	Correlation with total	Cronbach alpha if item deleted			
Q1. I do not know where or how to get help for these problems.	1.37 (0.97)	0.59	0.930			
Q2. It's too difficult to find Korean speaking psychiatrist or counselor.	1.37 (0.91)	0 . 6 2	0.930			
Q3. Arranging transportation to the clinic is difficult.	0.93 (0.80)	0 . 5 6	0.931			
Q4. I have no time to get help for this kind of problem.	1.27 (0.96)	0 . 6 0	0.930			
Q5. Making an appointment with mental health specialist is difficult.	1.16 (0.87)	0 . 6 9	0.928			
Q6. I have no health insurance.	1.21 (1.01)	0 . 5 1	0.932			
Q7. The cost of treatment is too expensive.	1.51 (1.06)	0 . 5 9	0.930			
Q8. I (or my family member) do not believe that these problems can be me ntal illness.	1.45 (0.99)	0 . 5 6	0.931			
Q9. I believe that this kind of problem is part of life.	1.74 (0.81)	0 . 5 1	0.931			
Q10. I do not believe that the illness is not serious enough to get help.	1.71 (0.87)	0 . 4 4	0.933			
Q11. I feel ashamed over having a mental illness.	1.15 (0.94)	0 . 7 0	0.928			
Q12. I do not want to worry my family.	1.16 (0.88)	0 . 7 3	0.928			

Q13. Family and friends can be more helpful than mental health specialist.

Q18. Oriental medicine is better than Western medicine/counseling.

Q19. I can't trust the mental health professionals to keep my problems sec

Q20. Even mental health specialists really don't understand my problems.

Q21. I prefer to see a family doctor rather than mental health specialist.

Q14. Mental health counseling is only for the crazy people.

Q15. Therapy does not help these problems.

Q22. It's difficult to talk about my feelings.

ret.

Q16. Medication does not help these problems.

Q17. I am afraid that I may get addicted to medicine.

1.28 (0.87)

0.72 (0.77)

0.97 (0.78)

1.01 (0.85)

0.92 (0.78)

0.96 (0.78)

0.93 (0.83)

1.22 (0.88)

1.12 (0.81)

1.18 (0.86)

0.60

0.56

0 . 6 7

0 . 6 2

0 . 6 3

0.63

6 5

6 5

6 0

5 3

0.930

0.930

0.931

0.931

0.929

0.930

0.929

0.929

0.929

0.929

#### Factor Analysis for the MHSBA

Factors pattern and associated barrier tool questions	Factor loading within relevant factor	Communality estimates	
Factor 1: Dissatisfaction with mental hea	alth service		
Q18	0.59	0.55	
Q19	0.66	0.60	
Q20	0.64	0.60	
Q21	0.53	0.51	
Q22	0.62	0.57	
Factor 2: Lack of resources			
Q1	0.59	0.50	
Q2	0.70	0.64	
Q3	0.67	0.56	
Q4	0.43	0.52	
Q5	0.63	0.68	
Factor 3: Attitude toward mental illness	& treatment		
Q14	0.68	0.61	
Q15	0.71	0.66	
Q16	0.67	0.54	
Q17	0.54	0.65	
Factor 4: Cost			
Q6	0.73	0.60	
Q7	0.71	0.67	
Factor 5: Personal belief			
Q8	0.64	0.54	
Q9	0.67	0.54	
Q10	0.62	0.45	
Other factors*			
Factor 6: Shame – Q11		0.64	
Factor 7: Family – Q12		0.62	
Factor 8: Other resources –Q13		0.43	

these factors were qualitatively formulated and kept based on clinical and cultural judgmen

# Reliability of MHSBA instrument

- Cronbach's alpha of 0.93, which implies high internal consistency.
- Since the standardized alpha decreased after removing each variable from the construct, we conclude that all variables are strongly correlated with other variables in the scale.

Cronbach

alpha

0.930

0.930

0.931

0.930

0.932

0.930

0.931

0.931

0.933

0.928

0.928

0.930

0.930

0.931

0.931

0.929

0.930

0.929

0.929

0.929

0.929

0.928

if item deleted

5 9

6

5

6

5

5

5

5

4 4

7 3

6

5

6

6 2

6

6 5

6

6 3

0

Correlation with total

1.37 (0.91)

0.93 (0.80)

1.27 (0.96)

1.16 (0.87)

1.21 (1.01)

1.51 (1.06)

1.45 (0.99)

1.74 (0.81)

1.71 (0.87)

1.15 (0.94)

1.16 (0.88)

1.28 (0.87)

0.72 (0.77)

0.97 (0.78)

1.01 (0.85)

0.92 (0.78)

0.96 (0.78)

0.93 (0.83)

1.22 (0.88)

1.12 (0.81)

1.18 (0.86)

Correlation and reliability analyses of the MHSBA instrument				
Barrier tool questions	Mean (SD)			
Q1. I do not know where or how to get help for these problems.	1.37 (0.97)			

Q2. It's too difficult to find Korean speaking psychiatrist or counselor.

Q5. Making an appointment with mental health specialist is difficult.

Q10. I do not believe that the illness is not serious enough to get help.

Q13. Family and friends can be more helpful than mental health specialist.

Q8. I (or my family member) do not believe that these problems can be mental illness.

Q3. Arranging transportation to the clinic is difficult.

Q4. I have no time to get help for this kind of problem.

Q6. I have no health insurance.

Q7. The cost of treatment is too expensive.

Q9. I believe that this kind of problem is part of life.

Q11. I feel ashamed over having a mental illness.

Q14. Mental health counseling is only for the crazy people.

Q12. I do not want to worry my family.

Q15. Therapy does not help these problems.

Q16. Medication does not help these problems.

Q17. I am afraid that I may get addicted to medicine.

Q18. Oriental medicine is better than Western medicine/counseling.

Q19. I can't trust the mental health professionals to keep my problems secret.

Q20. Even mental health specialists really don't understand my problems.

Q21. I prefer to see a family doctor rather than mental health specialist.

# Findings: Prevalence rate

- \*\* 13% of sample population demonstrated clinically significant levels of depressive symptoms.
- PHQ-9K depression scale and found that;
  - \* 15% were mildly depressed (scoring 5-9),
  - \* 5% were moderately depressed (scoring 10-14), and
  - 2% were severely depressed (scoring 15 or higher).
- Mean score of depression: 11.59 (SD=9.7):
- # Higher rate of depression compared to the general U.S. population

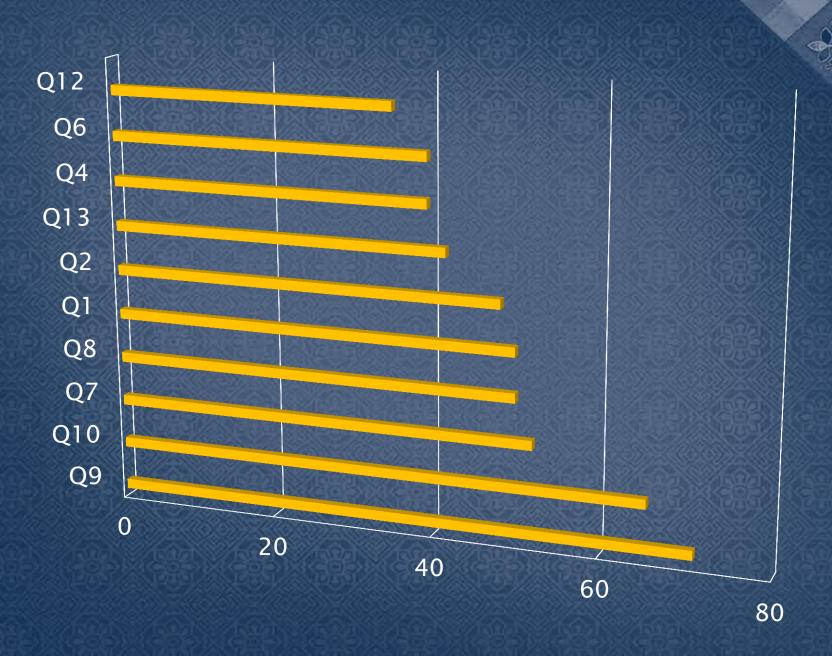
#### Findings: Demographic and MHSBA score

- Based on the multiple regression analysis
  - \* Years of stay in the US was negatively associated with the barrier score (*p*<0.0001), controlling other variables in the model roughly, per 1 year increment in the stay, 0.31 point decreased in score.
  - Higher education was associated with higher barrier, which may be interpreted as more educated people understand the barrier problem better and express more (p=.009)
  - \* People who had medical insurance (p=.05) and who were confident in English speaking (p=.003) tended to show less barrier.
- The correlation between depression score and barrier score was shown to be low (r=.11), which may imply that the barrier may be a common problem irrespective of severity of depression."

#### 10 Most Common Reasons for Not Receiving Mental Health Services

%	Reasons for Not Receiving Mental Health Services
70.97	Q9: Problems are a natural part of our lives.
65.45	Q10: Problems are not too serious to seek for help.
52.03	Q7: Treatment is too costly.
50.00	Q8: My or my family's problems are not disease.
49.96	Q1: I don't know where/how to get help.
48.18	Q2: It is difficult to find service providers who speak Korean.
41.63	Q13: Friends and family are more helpful than mental health professionals
39.43	Q4: I don't have time to get services.
39.43	Q6: I don't have medical insurance.
35.25	Q12: I don't want to get help because it can worry my family.

# 10 Most Common Reasons for Not Receiving Mental Health Services



# Conclusion

This study showed good psychometric properties of the MHSBA scale as a newly developed instrument to assess barriers to mental health services among Korean Americans.

Since this is the first trial of testing this instrument's validity and reliability, further studies are warranted to assess its external validity and generalizability to other Korean Americans or other subgroups of Asian Americans such as Chinese, Indians, Vietnamese, and Philippines.

The important finding of this study was that this barrier instrument might be useful to assess the perceived barriers to mental health services among general Korean Americans rather than only to Korean Americans with mental illness.

Further studies supporting this finding would highlight the importance of community education to increase awareness of barriers to mental health services and help identify high priority groups.

This instrument can also be useful to determine most frequently selected individual barriers among the study group.

# THANK YOU 감사합니다