



Effectiveness of Primary Care-Behavioral Health Integration in Asian American-Specific Mental Health Setting

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Introduction

- Individuals with serious mental illness (SMI) on average die 25 years sooner than those in the general population¹.
- Recent studies showed promising results in improving medical and behavioral health among persons with SMI in primary care-behavioral health integration programs^{2,3}
- However, Asian Americans and other racial minorities were underrepresented in the literature²
- Research found that Asian American immigrants with SMI underutilized healthcare services due to cultural and linguistic barriers⁴; these barriers may be exacerbated from those with SMI

Purpose

The present study evaluated the effectiveness of the Primary Care-Behavioral Health Integration program implemented by a large community behavioral health agency specifically serving Asian American immigrant adults with SMI.

Method

Participants

- 249 (54.2% females) Asian American participants in the PCI program
- Ranged in age from 24 to 83 years (M=47.58, SD=12.19)
- Ten ethnicities included Chinese (49.8%), Cambodian (16.1%), Vietnamese (14.9%), Korean (9.6%), Filipino (4.8%), Mien (2%), Japanese (1.2%), Thai (0.8%), Laotian (0.4%) and Burmese (0.4%)

Primary care integration (PCI) program

- Co-located primary care and behavioral health services
- Multidisciplinary team
- Wellness activities

Procedures

- Longitudinal data were collected from participants who enrolled in the PCI program between 2010-2014
- All assessments were conducted at baseline, at 6 months and at 12 months

Method

Measures

- *Demographics.* Gender, age, ethnicity
- *Daily life functioning:* measured by the mean of eight items on a 5-point scale; sample items include "I deal effectively with daily problems."
- *Kessler Psychological Distress Scale (K6):* measured by the sum of six items on a 4-point scale; possible scores range from 0-24, where ≥ 10 indicates serious distress
- *Social connectedness:* measured by the mean of four items on a 5-point scale; sample items include "I have people with whom I can do enjoyable things."
- *Physical health.* Waist circumference, BMI, total cholesterol, HDL cholesterol, LDL cholesterol

Results

General Estimating Equations (GEE) analyses were conducted to examine the changes of health outcomes among participants in the PCI program (Table 2). Results showed that there was a significant time effect for participants' daily life functioning and social connectedness, suggesting that both improved over time, even when controlling for gender and age. Psychological distress significantly decreased over time. There was also a gender effect for psychological distress, indicating that males and females differed in their self-reported psychological distress levels. As for physical health outcomes, results showed total cholesterol level as well as low-density lipid (LDL) cholesterol level reduced over time, when controlling for age. There were no statistically significant changes in waist circumference, BMI and high-density lipid (HDL) cholesterol.

Discussion

- The results supported that integration programs helped to address health disparities faced by individuals with SMI, both in the whites and Asian American populations
- Consistent with the documented link between physical and psychological health, integration programs improved psychosocial functioning as well as reduced risk of physical diseases
- Similar to studies examining multimodal interventions for individuals with SMI, we found that wellness activities such as balanced diet and exercise helped to lower cholesterol and reduce psychological distress.
- Consistent with previous studies showing gender differences in psychological distress, it is possible that integration programs produce differential psychological outcomes among males and females

Future directions

- Future research should focus on using randomized controlled trials and on examining long term outcomes of integration programs
- The role of gender and social connections should also be examined in correlating to the improvement of health outcomes in integration programs

Table 1. Baseline characteristics of participants

Baseline Indicator	N	Mean (SD)
Daily life functioning	245	3.43 (1.02)
Psychological distress	217	11.49 (7.28) ^a
Social connectedness	243	3.38 (1.09)
Waist circumference (cm)	183	96.96 (14.85) ^b
BMI (kg/m ²)	222	26.38 (5.09) ^c
Total cholesterol (mg/dL)	169	196.55 (44.26)
HDL Cholesterol (mg/dL)	169	50.14 (13.60)
LDL cholesterol (mg/dL)	161	115.19 (40.56)

^a The K6 Psychological distress scale scores ≥ 10 indicates serious distress; 60.5% of the sample reached the established cutoff for serious distress

^b The International Diabetes Federation defines abdominal obesity as ≥ 90 cm for men and ≥ 80 cm for women

^c The American Diabetes Association issued a new BMI cut point for diabetes screening of ≥ 23 kg/m²

Table 2. GEE Analysis of longitudinal outcomes on participants' health

Effect	Outcomes	Estimate	Std. Error	95% Confidence limits		Wald Chi-square	Sig.
				Lower	Upper		
Time	Daily life functioning	.20	.04	.12	.29	22.61	<.01
	Psychological distress	-1.79	.25	-2.22	-1.30	52.82	<.01
	Social connectedness	.177	.04	.091	.26	16.37	<.01
	Total Cholesterol	-5.01	1.7	-8.28	-1.73	8.98	<.05
	LDL Cholesterol	-5.0	1.5	-8.03	-1.98	10.52	<.01

References

1. Agency for Healthcare Research and Quality. (2009). *Mental health research findings*. Rockville, MD: U.S. Department of Health and Human Services.
2. Cabassa, L. J., Ezell, J., & Lewis-Fernandez, R. (2010). Lifestyle Interventions for Adults with Serious Mental Illness. *Psychiatric Services, 61*(8), 774-782.
3. Centers for Medicare & Medicaid Services. (2010). Dear State Medicaid director.
4. Kim, W., & Keefe, R. H. (2010). Barriers to healthcare among Asian Americans. *Social Work in Public Health, 25*, 286-295.
5. Zhang, W., & Ta, V. M. (2009). Social connections, immigration-related factors, and self-rated physical and mental health among Asian Americans. *Social Science and Medicine, 68*(12), 2104-2112.

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