Exploring Resilience among Asian Immigrants toward Improving Global Healthcare

Jennifer Kawi, PhD, MSN, APRN, FNP-BC
Associate Professor
Doctoral Program Director
University of Nevada, Las Vegas
School of Nursing
Introduction

• Resilience defined: character, behavior, and abilities demonstrative of successful coping in the presence of stress

• Population foci: Filipino Americans, women, seniors; Asian Immigrants (AIs) in pain

• Current scientific literature does not provide evidence on comprehensive exploration of resilience among AIs.
Purpose

• This symposium offers various perspectives on resilience among AIs influenced by their culture when faced with adversity.

• Particularly, the cohesive presentations emphasize AIs who are often underserved.
Overview of Presentations

• Andrew Thomas Reyes, PhD: Cultural Factors Affecting Resilience of Filipino Immigrant Women

• Reimund Serafica, PhD: Acculturative Stress and Resilience among Older Filipino Americans

• Jennifer Kawi, PhD and Andrew Thomas Reyes, PhD: Resilience: Understanding how Asian Immigrants Manage in the Face of Chronic Pain
Summary

- Increasing AI population but data are lacking among AIs in the scientific literature
  - Impact global healthcare and healthcare equity
  - Significance of culture in health
- Resilience is high among AIs and particularly among Filipino Americans
- Resilience has a protective function
- Investigate resilience interventions
Cultural Factors Affecting Resilience of Filipino Immigrant Women

Presented by:
Andrew Thomas Reyes, PhD, RN
Assistant Professor
School of Nursing
University of Nevada, Las Vegas
Acknowledgement

UNLV School of Nursing
Dean Research Support Fund

*No conflict of interest
Learning Objectives

• To discuss the relationships between resilience, acculturative stress, and cultural family beliefs about disclosing mental health problems among Filipino immigrant women.

• To examine implications from the findings of the study and explore specific recommendations for nursing practice and research
Background

• Asian Americans: fastest growing racial group in the U.S.  (U.S. Census Bureau, 2017)

• 19% of Asian Americans are Filipinos  (Hoeffel et al., 2012)

• Third largest Asian group in the U.S. after Chinese and Asian Indians  (Hoeffel et al., 2012; Lopez, Ruiz, & Patten, 2017)

• There are 67 males for every 100 females  (U.S. Census Bureau, 2011).
• Filipino American women: mental health challenges
  – Highest prevalence of moderate to severe postpartum depression (Huang, Wong, Ronzio & Yu, 2007)
  – Highest rate of substance abuse among other Asian American women (Appel, Huang, Ai, & Lin, 2011)
  – More women reported being more depressed than men, and women reported more symptoms of depression than men (Espiritu & Wolf, 2001; David, 2008; Ying & Han, 2006)
• Acculturation and mental health
  – Acculturation to US Western culture is significantly related to depression and other negative mental health outcomes among Asian immigrants (Hwang & Ting, 2008; Singh, Schulz, Neighbors, and & Griffith, 2017).
Purpose of the Study

• The present study aimed to examine the cultural factors affecting resilience among Filipino female immigrants living in the United States.

• Cultural factors
  – Acculturative stress
  – Family beliefs about disclosing mental health problems outside their families.
Specific Aims of the Study

• To examine:
  – Levels of resilience and acculturative stress
  – Relationship between resilience, acculturative stress, and family norms against disclosure of mental health problems
  – Potential mediating effect of resilience on acculturative stress and family norms against disclosure of mental health problems
Theoretical Framework

- Ecological Framework of Resilience (Ungar, 2008)
- Resilience are based not only on an individual’s responses, but also—and more importantly—are conditioned by many factors including environment, society, and culture
Key Concepts of the Study

• **Acculturative stress**: behavioral responses to acculturation that indicate poor mental health, psychosomatic symptoms, and identity confusion (Berry, Kim, Minde, & Mok, 1987)

• **Family norms** against disclosure of mental health problems (Sanchez & Gaw, 2007; Augsberger, Yeung, Dougher, & Hahm; Han & Pong, 2015)

• **Resilience**: Set of individual qualitative that allow one to thrive despite significant challenges (Connor & Davidson, 2003)
Gaps in the Literature

• Significant negative relationship between acculturative stress and resilience (Achuleta, 2015; Cheung & Yue, 2012; Miletric, 2014; Yoo et al., 2013; Miller & Chandler, 2002; Yu, Stewart, Liu & Lam, 2014)

• Resilience and acculturative stress unclear among Asian Americans

• Inconsistent findings on relationship between acculturative stress and disclosure of mental health concerns (Greenidge, 2007; Fung & Wong, 2007; Thikeo, Florin, & Ng, 2015; Whealin et al., 2013, 2015)
Methods

• Paper-and-pencil questionnaire survey
• Eligibility criteria:
  – 18 years of age or older
  – Female
  – Filipino in ethnic origin
Measures

• Resilience
  – Connor-Davidson Resilience Scale (CD-RISC, Campbell-Sills & Stein, 2007)

• Acculturative Stress
  – Social, Attitudinal, Familial, and Environmental Acculturative Stress Scale (SAFE, Mena, Padilla, & Maldonado, 1987)

• Family Norms Against Disclosure of Mental Health Problems
Procedures and Data Analyses

- Inferential statistical models were used
- Mediation models
Model Tested

Mediator (M) Resilience [CD-RISC]

IV [X] Acculturative Stress [SAFE]

DV [Y] Family Norms [FNAD]

a

b

c'

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Results

• Participants (n=159):
  – Ages 35–64 years (60.4%)
  – Employed (77.5%)
  – First-generation (91.2%)
  – Income: less than $75,000 (72.1%)
  – Bachelor’s degree (69.2%)
Results (cont)

- CD-RISC overall mean score: 30.4 (SD = 7.28)
- SAFE overall mean score: 29.6 (SD=18.33)
Results (cont)

- CD-RISC was significantly correlated negatively with SAFE \((r_s = -0.285, p < 0.001)\)

- CD-RISC was significantly correlated negatively with FNAD \((r_s = -0.160, p = 0.052)\)

- SAFE was not correlated with FNAD \((r_s = 0.03, p = 0.765)\)
Results (cont)

• SAFE instrument were significant predictor of CD-RISC ($\beta = -.08$, $p = .018$)

• CD-RISC were not significant predictors of FNAD ($\beta = -0.03$, $p = .061$)

• SAFE instrument were not significant predictors of FNAD ($\beta = -.001$, $p = .857$)

• No indirect relationship of SAFE to FNAD accounting for the mediator of CD-RISC (95% CI: [-.0001, .0055])
Discussion

• Variability of resilience among Asian women
  (Reyes & Constantino, 2016)

• Educational attainment on acculturative stress
  (Abdulahad, Graham, Montelpare, & Brownlee, 2014; Berry, 1997; Dow, & Woolley, 2011)

• Prevalence of mental health problems among Asian Americans related to family norms
  (Abe-Kim et al., 2007; Guo et al., 2015)
Limitations

• Abbreviated version of CD-RISC
• Geographical limitation of the sample
• Self-report surveys
Conclusions

• Aggregating different Asian ethnicities (Museus & Truong, 2009)

• The need to develop resilience interventions and resources
References


Acculturative Stress and Resilience among Older Filipino Americans

Reimund Serafica, Ph.D., RN
Assistant Professor
University of Nevada, Las Vegas
School of Nursing
Learning Objectives

1. To describe the relationship between acculturative stress and resilience among older Filipino Americans in the U.S.

2. To describe the physical and mental health self-evaluations of older Filipino Americans in the U.S.

*No conflict of interest

The study is funded by Asian American Pacific Islander Nurses Association (AAPINA): Geropsychiatric Research Grant (2016-2018).
Background

• Acculturation is a multidimensional process in which individuals adapt to a new country (Sam and Berry 2010; Serafica et al., 2016).

• Acculturative stress refers to the stress that occurs during the process of acculturation (Jang et al., 2010).
Background (cont.)

- Older immigrant populations are increasing and will continue
- Immigration-related stress can drain one’s inner resources
- Immigration can trigger or intensify stress during acculturation which may negatively affect an individual’s physical and mental health (Singh et al., 2015).
Evidence suggests that level of acculturation is among the most important factors in predicting the health status of an immigrant (Ward & Geeraert, 2016).

Understanding the relationship between aging and stress is critical, particularly for the aging immigrant population.
Purpose

• The aim of this study was to explore the interplay between acculturation, acculturative stress, and resilience, and their collective impact on physical and mental health self-evaluation among older Filipino Americans.
Methods

• The study was cross-sectional from older Filipino immigrants, 55 years and older (N = 123) who were living in the western part of the United States.

• Participants were recruited using a convenience sampling, mostly from a primary care clinic with a large number of Filipino patients in Southern Nevada.
Instruments

- Short Acculturation Scale for Filipino Americans (ASASFA)
- Social, Attitudinal, Familial, and Environmental (SAFE) Acculturative Stress Scale
- Connor-Davidson Resilience Scale 10 (CD-RISC-10)
- The Global Health Instrument
- Demographic Questionnaire
Results

- Participants’ mean age was 67.6 years
- Almost all (99%) were born in the Philippines, and the mean length of stay in the United States was 25.3 years (SD = 17.67).
- The mean years of education completed was 12.6 (SD = 3.85)
- 38% of sample had a household income between $25,000 and $49,999.
Table 1

*Ordinary Least Square (OLS) Estimates Predicting Acculturative Stress and Resilience*

<table>
<thead>
<tr>
<th></th>
<th>Acculturative Stress $(N = 122)$</th>
<th>Resilience $(N = 122)$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intercept</strong></td>
<td>123.77 (21.42)***</td>
<td>11.77 (6.48)</td>
</tr>
<tr>
<td><strong>Gender</strong> $(1 = \text{Female})$</td>
<td>-6.16 (3.47)</td>
<td>-0.64 (1.85)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>-0.34 (0.24)</td>
<td>0.01 (0.84)</td>
</tr>
<tr>
<td><strong>Marital Status</strong> $(1 = \text{Married})$</td>
<td>-5.03 (5.87)</td>
<td>-3.78 (1.93)*</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>0.07 (2.53)</td>
<td>1.22 (0.79)</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>-0.07 (1.89)</td>
<td>0.29 (0.64)</td>
</tr>
<tr>
<td><strong>Level of Acculturation</strong></td>
<td>-1.36 (0.28)***</td>
<td>0.41 (0.09)***</td>
</tr>
<tr>
<td><strong>R-Squared</strong></td>
<td>0.24</td>
<td>0.25</td>
</tr>
</tbody>
</table>

*Note.* $*P = .05$, $**P < .001$
### Results (cont.)

Table 2  
*Ordinary Least Square (OLS) Estimates Predicting Physical Health*

<table>
<thead>
<tr>
<th></th>
<th>Estimates (SE)</th>
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<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>( (N = 123) )</td>
<td>( (N = 122) )</td>
<td>( (N = 122) )</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>61.29 (6.93)**</td>
<td>67.51 (7.38)**</td>
<td>62.99 (7.52)**</td>
<td></td>
</tr>
<tr>
<td>Gender (1 = Female)</td>
<td>-3.64 (1.60)*</td>
<td>-3.95 (1.62)*</td>
<td>-3.69 (1.63)*</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.22 (0.08)**</td>
<td>-0.23 (0.08)**</td>
<td>-0.23 (0.08)**</td>
<td></td>
</tr>
<tr>
<td>Marital Status (1 = Married)</td>
<td>-0.86 (1.67)</td>
<td>-1.12 (1.65)</td>
<td>0.48 (1.67)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.45 (0.69)</td>
<td>0.45 (0.71)</td>
<td>0.31 (0.70)</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>-0.14 (0.58)</td>
<td>-0.15 (0.59)</td>
<td>-0.21 (0.58)</td>
<td></td>
</tr>
<tr>
<td>Level of Acculturation</td>
<td>0.07 (0.09)</td>
<td>-0.004 (0.08)</td>
<td>-0.03 (0.03)</td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress</td>
<td>-</td>
<td>-0.05 (0.03)</td>
<td>-0.03 (0.03)</td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>-</td>
<td>-</td>
<td>0.15 (0.08)</td>
<td></td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.12</td>
<td>0.14</td>
<td>0.16</td>
<td></td>
</tr>
</tbody>
</table>

Note. *\( P < .05 \), **\( P < .01 \), ***\( P < .001 \)
Table 3

**Ordinary Least Square (OLS) Estimates Predicting Mental Health**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( (N = 123) )</td>
<td>( (N = 122) )</td>
<td>( (N = 122) )</td>
</tr>
<tr>
<td><strong>Intercept</strong></td>
<td>52.89 (7.14)*****</td>
<td>66.70 (7.34)*****</td>
<td>61.09 (7.68)*****</td>
</tr>
<tr>
<td>Gender (1 = Female)</td>
<td>0.87 (1.56)</td>
<td>0.11 (1.46)</td>
<td>0.43 (1.41)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.15 (0.08)*</td>
<td>-0.20 (0.07)**</td>
<td>-0.19 (0.07)**</td>
</tr>
<tr>
<td>Marital Status (1 = Married)</td>
<td>-0.74 (1.73)</td>
<td>-1.19 (1.58)</td>
<td>-0.39 (1.52)</td>
</tr>
<tr>
<td>Education</td>
<td>1.29 (0.69)</td>
<td>1.19 (0.67)</td>
<td>1.01 (0.67)</td>
</tr>
<tr>
<td>Income</td>
<td>0.01 (0.61)</td>
<td>0.06 (0.56)</td>
<td>-0.02 (0.55)</td>
</tr>
<tr>
<td>Level of Acculturation</td>
<td>0.09 (0.09)</td>
<td>-0.05 (0.09)</td>
<td>-0.10 (0.09)</td>
</tr>
<tr>
<td>Acculturative Stress</td>
<td>-</td>
<td>-0.11 (0.03)*****</td>
<td>-0.08 (0.03)*****</td>
</tr>
<tr>
<td>Resilience</td>
<td>-</td>
<td>-</td>
<td>0.19 (0.08)*</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.09</td>
<td>0.09</td>
<td>0.24</td>
</tr>
</tbody>
</table>

*Note. *\( P < .05, **P < .01, ***P < .001 \)*
Correlation between Level of Acculturation, Acculturative Stress, Resilience, and Physical and Mental Health

<table>
<thead>
<tr>
<th></th>
<th>Level of Acculturation</th>
<th>Acculturative Stress</th>
<th>Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturative Stress</td>
<td>-0.47***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>0.45***</td>
<td>-0.52***</td>
<td></td>
</tr>
<tr>
<td>Physical Health</td>
<td>0.01</td>
<td>-0.09</td>
<td>0.17</td>
</tr>
<tr>
<td>Mental Health</td>
<td>0.16</td>
<td>-0.37***</td>
<td>0.36***</td>
</tr>
</tbody>
</table>

Note: ***P < .001
Discussion

• In this study, we found out that older adults with a higher level of acculturation tend to have higher resilience and lower acculturative stress.

• The most interesting finding that emerged from this study was acculturation level has no significant influence on older immigrants’ self-rated physical and mental health.
Discussion (cont.)

• Our mediation analysis revealed a statistically significant positive, indirect effect of acculturation level, which suggests that it influenced both the physical and mental health of older adults, primarily by reducing their acculturative stress and increasing resiliency.
Implications and Conclusions

• Assessment of acculturative stress of older immigrants among nurses and nurse practitioners
• Strategies to enhance resiliency
• Advocacy through cultural awareness, knowledge, and skills
• Educate the family members
• More research to further explore acculturative stress among older adults
Implications and Conclusions (cont.)

• Further explore the intergenerational dynamics of older immigrants
• Resilience can serve as a cushion for acculturative stress and it can be used in older adults.

*Limitedations*: Acculturation stress and resilience scores and their associations with residency were not examined; convenience sampling
Selected References


Articles

  http://dx.doi.org/10.1080/01612840.2018.1543740

Resilience: Understanding how Asian Immigrants Manage in the Face of Chronic Pain

Jennifer Kawi, PhD, MSN, APRN, FNP-BC
Andrew Thomas Reyes, PhD, RN
Learning Objectives

• To explore how resilience plays a significant part in the management of chronic pain among Asian Immigrants

• To describe the implications of the findings in the areas of research, education, practice, and policy

*Supported by the Health for Nevada Award University of Nevada, Las Vegas (2018 -2019)

*No conflict of interest
Background

• Chronic pain defined: pain that goes beyond 3-6 months

• Global impact of chronic pain: affects about 30% of adults\(^1\) and as high as 45% in Asian countries\(^2\)

• Annual healthcare costs: $4,500/person\(^3\)

• More effective pain management is necessary considering cultural context of care
Background (cont)

- Large AI population in developed countries
- About 1 in 20 (5.7%) of the total US population are AIs\(^4\)
- About 1 in 20 (5%) adults who self-report chronic pain in the US are AIs,\(^5\) similar % in other countries
- AIs are underrepresented in chronic pain research\(^6\)
Purpose

• Conduct an integrative review to provide an understanding on how AIs manage their chronic pain

• AIs are those with citizenship at birth in Asian countries > immigrated or became citizens in new countries of residence
Methods

• Whittemore and Knafl\textsuperscript{7} to enhance rigor and reduce bias
  ▪ Problem Identification, Literature Search, Data Evaluation, Data Analyses, Presentation
    ▪ Data Analyses: Data reduction, Display, Comparison, Conclusion drawing, Verification)

• Literature Search: 3 researchers collaborated to conduct a systematic search

• Databases: Cochrane, EBSCO, ProQuest, PubMed, Scopus, ScienceDirect, and Web of Science.

• Search Words: Asian, Asian American, Asian immigrant, pain, and pain management, in various combinations
Methods (cont)

• Inclusion Criteria: written in English, included AIs, addressed pain management
• Data Evaluation: 15 studies met inclusion criteria
  ▪ Scientific evidence from studies were rated based on recommendations\textsuperscript{8,9}
• Data Analyses : Consensus reached on themes
• Data Presentation: Guidelines for Preferred Reporting Items for Systematic Reviews and Meta-Analysis\textsuperscript{10}
Results

• Study designs: 1 mixed methods, 5 quantitative (2 RCTs, 5 descriptive), 7 qualitative (1 grounded theory, 6 descriptive)
• Participants: 7 to 2095 sample sizes, adults, majority were Chinese Americans
• 12 studies conducted in the US; others were in Australia, Canada, and UK
• 6 studies done in the past 5 years, others were older
Results (cont)

• Overall Theme was on how resilience enhanced effective self-management (SM) among AIs in chronic pain

• AIs accepted and adapted to their chronic pain:
  ▪ Something natural
  ▪ Normal part of aging
  ▪ Proceeded to function effectively in their lives
  ▪ Tolerance
  ▪ Minimal complaints
  ▪ Exerted control over pain
    ▪ Exercises despite the pain
    ▪ Maintained positive affect despite the pain
Results (cont)

- AIs in chronic pain were deeply rooted in their cultural beliefs demonstrating resilience in this process
  - Chinese older adults: performed culturally-related health promotion activities daily despite pain
  - Korean women: reconstructed how they perceived pain (representation of aging, social expectations) to increase their pain tolerance
  - Cambodian refugees: pain is inferior and not as significant compared to challenges of relocation and current refugee situation
- However, resilience among AIs existed in a continuum (+ end is SM and – end reflects the “breaking point”
Results (cont)

• In demonstrating SM based on their resilience:
  - Medical Management: strong preference for Traditional Eastern Medicine (e.g., Tai Chi), ethnic healers
  - Role Management: less likely to complain and report pain, take control, believe in higher power to help address pain
  - Emotional Management: endure and manage despite the pain
Discussion

- AI’s resilience to chronic pain generally resulted to improved SM
- Resilience defined: having minimal burden and dysfunction despite chronic pain
  - Operationalized in the literature through acceptance, positive affect, adaptive pain beliefs\textsuperscript{11}
- SM refers taking responsibility for one’s care
  - Operationalized through medical management, role management, and emotional management\textsuperscript{12}
- There are also limits to resilience and SM
Implications and Conclusions

• Clinical Practice and Education
  ▪ Ensure Culture competence
  ▪ Avoid stereotypes
  ▪ Facilitate communication to address likelihood of underreporting of pain
  ▪ Evaluate mental health in cases of unnecessary endurance to severe and persistent pain to address likelihood of underdiagnosis and undertreatment

• Research
  ▪ Increase representation of AIs in pain studies
  ▪ Address likelihood of subgroup differences between AIs
Implications and Conclusions (cont)

• Research (cont)
  ▪ Investigate chronic pain among pediatric AIs
  ▪ Test mediating and moderating roles of resilience in SM of chronic pain
  ▪ Evaluate resilience interventions

• Policy
  ▪ Engage AIs in policies that impact healthcare
References


Thank you!
Questions and Comments?

• Andrew Thomas Reyes
  andrewthomas.reyes@unlv.edu

• Reimund Serafica
  reimund.serafica@unlv.edu

• Jennifer Kawi
  jennifer.kawi@unlv.edu