

Application of Andersen Model to Verify Utilization of Maternal and Child's Preventive Care Among South-East Asian Immigrant Women in Taiwan: Influence of Acculturation and Associated Factors

Shu-Fen Kuo*, Assistant Professor, School of Nursing, College of Nursing, Taipei Medical University
Wen-Yin Chang, Professor, Graduate Institute of Nursing, College of Nursing, Taipei Medical University
Ching-Min Chen, Professor, Department of Nursing, School of Medicine, National Cheng-Kung University

Introduction

Previous studies revealed that utilization of maternal and child's preventive care were different among women from various origins. The acculturation phenomenon is believed to be an important factor influencing immigrants' health behavior.

Purpose

This is a report of utilization of maternal and child's preventive care based on Andersen health seeking behavior model. The purpose of this study was to examine the influence of predisposing, enabling, and need factors on maternal and child's preventive care use among immigrant women in Taiwan, and further to explore role of acculturation and other predictors of both utilizations.

Methods

A cross-sectional survey was conducted. Immigrant women who were living in Taiwan with their Taiwanese husbands and with children under 7 years old were included. Andersen behavior model (1995) was used to identify influencing factors with acculturation and medical access barrier be added in the enabling factors, and health status in need factor. The Structural Equation Modeling (SEM) method was used by SPSS 17.0 and AMOS 18.0 for data analysis.

Results

The completed sample included 284 women lived in 2 counties of Taiwan who were 28.6 years old (SD=4.33) in average. Results showed that the Chi-square test for the model produced a statistically significant finding ($\chi^2=568.74$, $df=206$, $p=0.001$; $\chi^2=539.86$, $df=206$, $p=0.001$) of maternal and child's preventive care use. Based on the χ^2/df ratio (2.76; 2.62), the second-order factor baseline model fits the data quite well (CFI=0.826, RMSEA=0.079; CFI=0.837, RMSEA=0.076). There were four factors significantly predicted utilization of maternal preventive care: length of stay in Taiwan, educational level in original country, perceived support and integration. And three factors significantly predicted utilization of child's preventive care: family income, perceived support and integration.

Conclusion.

Our findings indicated a significant relationship of predisposing and enabling factors with utilization of maternal and child's preventive care. This study demonstrated that acculturation was a vivid factor to influence the utilization of maternal and child's preventive care use. Clinical interventions based on these results should be developed and further to examine its effects in order to improve health behavior of immigrant women who might be in different acculturation and need more health support.

Table 1 The model's path coefficient of utilization of maternal preventive care

	SE ^a	USE ^b	standard errors	C.R. value	P value
UMPC ^c <-- LST ^d	-0.14	-0.139	0.07	-1.996	0.046
UMPC <-- ELOC ^e	0.171	0.169	0.069	2.441	0.015
UMPC <-- Family income	-0.055	-0.055	0.07	-0.79	0.43
UMPC <-- Separation	0.046	0.061	0.089	0.686	0.493
UMPC <-- Assimilation	0.06	0.087	0.097	0.9	0.368
UMPC <-- Integration	0.237	0.509	0.162	3.138	0.002
UMPC <-- Marginalization	0.03	0.044	0.101	0.438	0.662
UMPC <-- BMPC ^f	-0.083	-0.082	0.07	-1.183	0.237
UMPC <-- PP ^g	0.053	0.052	0.07	0.747	0.455
UMPC <-- SMOC ^h	0.243	0.239	0.069	3.454	***

SE^a=Standardized estimates; USE^b=Unstandardized estimates; UMPC^c=utilization of maternal preventive care; LST^d=length of stay in Taiwan; ELOC^e=Educational level in original country; BMPC^f=Barrier of maternal preventive care; PP^g=Problems of pregnancy; SMOC^h=Support of maternal preventive care

Table2 The model's path coefficient of utilization of child's preventive care

	SE ^a	USE ^b	standard errors	C.R. value	P value
UCPC ^c <-- LST ^d	-0.172	-0.114	0.071	-1.608	0.108
UCPC <-- ELOC ^e	0.075	0.05	0.071	0.701	0.483
UCPC <-- Family income	0.287	0.191	0.071	2.686	0.007
UCPC <-- Separation	-0.037	-0.033	0.091	-0.36	0.719
UCPC <-- Assimilation	-0.029	-0.028	0.099	-0.288	0.773
UCPC <-- Integration	0.236	0.335	0.155	2.159	0.031
UCPC <-- Marginalization	0.128	0.128	0.104	1.236	0.216
UCPC <-- BCPC ^f	-0.039	-0.026	0.071	-0.365	0.715
UCPC <-- PC ^g	0.204	0.136	0.07	1.947	0.052
UCPC <-- SCOC ^h	0.473	0.314	0.07	4.468	***

SE^a=Standardized estimates; USE^b=Unstandardized estimates ;UCPC^c=utilization of child's preventive care; LST^d=length of stay in Taiwan; ELOC^e=Educational level in original country; BCPC^f=Barrier of child's preventive care; PC^g=Problems of child; SCOC^h=Support of child's preventive care