

# Limited Access to Health Care and the Impact thereof on Married Women's Mental Health

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## Abstract

Given the rapidly growing population of the have-nots, the rate of unmet medical and mental health needs is expected to increase considerably. According to a recent study using the Korea Health Panel (KHP) survey's 2011 data, lack of time and money were found to be some of the main reasons for individuals' failure to seek medical attention. Delayed medical treatment leads to serious health problems, contributing towards limited ability to perform daily functions, which could also result in psychological distress and care burden. This study examined the roles played by income, frequency of problems in daily functioning due to limited access to health care, and frustration in married women's subjective evaluation of their depression and anxiety. Based on a secondary analysis of the KHP survey's 2011 data, this study adopted a confirmatory approach in testing a Structural Equation Model (SEM) including these key factors, controlling for subjects' education level. The sample included 2,764 married women between the ages of 25 and 65 years. Multiple fit indices including the Chi-square statistics ( $\chi^2$ ), CMIN/df, the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA) were used to assess the model fit. The results showed a consistent, satisfactory model fit [(Model  $\chi^2$  (10) = 71.953,  $p < .01$ , CMIN/df = 7.1953, CFI = .956, RMSEA = .047)], suggesting a good fit between the proposed model and the data. A CFI value of .956 and an RMSEA value of .047 (.05) indicate a good fit. Based on the model fit indices and path coefficient results, it is fair to conclude that the lower the income, the higher the likelihood (or frequency) of individuals experiencing frustration and daily functional issues associated with unmet medical needs and in turn, experiencing depression and anxiety symptoms or problems. Implications to practice include the need to pay greater attention to low-income families, with regard to their ability to meet their medical needs, so as to further prevent the deterioration of their physical health and mental health. Furthermore, the government ought to assess mental health needs among low-income families with poor physical health given the association between economic status, physical health and mental health.

**Keywords:** Health, Income, Mental Health, Women

## 1. Introduction

According to a study that used 2011 data from the Korea Health Panel (KHP) survey, some of the main reasons for South Koreans' failure to seek medical attention are lack of time and money. The issue has become increasingly serious, given the growing gap between the haves and the have-nots<sup>1</sup>. Low-income families, in particular, have been reported to simply "bite the bullet", which means that

their medical needs are the least of their concerns when they have to make ends meet during economic hardships<sup>2</sup>. This is mainly because, for low-income families, medical services are directly responsible for the financial difficulties experienced by low-income families. This is not to mention the fact that low-income families' insurance coverage is usually not equivalent to that of the affluent. Therefore, overspending on a relatively tight budget presents a dilemma for low-income individuals<sup>3</sup>. This, in

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turn, has led to a strong association between low income and limited access to health care, regardless of gender<sup>1,2,4</sup>. Given the rapidly growing population of indigents in South Korea, the rate of unmet medical and mental needs is expected to increase significantly.

Various forms of negative affect can result from poor physical health, especially when individuals are in great pain. Limited access to health care can lead to issues that affect daily functioning and, particularly, mental health<sup>5</sup>. For instance, delayed medical treatment leads to serious problems, including limited ability to perform daily functions, psychological distress, frustration, care burden, depression, and poor quality of life. On this basis, poor health or living with pain may affect individuals' quality of life and life satisfaction<sup>8</sup>. The negative effects of poor health include stress, frustration, depression, anxiety, tension and feelings of helplessness. For instance, an individual with a chronic disease is likely to lead a life filled with restrictions, which may be accompanied by frustration<sup>9</sup>. Nonetheless, one of the most important reasons why we must consider both physical health and mental health issues of low-income individuals, in particular, is because of the high multimorbidity rates and, in turn, a great amount of medical expenses associated with identifying and treating the problems. As for the Medicaid population in the United States, individuals who spent the most in medical care were those with chronic disease(s) and mental illness and/or substance use disorder, as much as 60 to 75 percentage differences<sup>7</sup>. In fact, about two-thirds of the Medicare beneficiaries are reported to simultaneously have some type of mental illness and/or substance use disorder. For these individuals with both physical and mental health issue, the average cost associated with care were 3.5 times higher than their counterparts<sup>7</sup>. To make matters worse, low-income or economically deprived individuals are at greater risks to experience multimorbidity mental health and chronic diseases and at 10 to 15 years earlier than the more affluent population<sup>6</sup>. Some of the most common health issues, chronic diseases in particular, to comorbid in low-income individuals with mental illness include asthma/COPD, congestive heart failure, coronary health disease, diabetes and hypertension<sup>7</sup>. Given that a great number of mentally ill individuals live without getting an accurate diagnosis and treatment, the size of this population is likely to be much larger than reported. In other words, low-income individuals who suffer from both medical and mental problem require greater attention in terms of cost and care.

Not to mention, family members of the physically or mentally ill are suggested to experience stress, frustration, loneliness, and care burden, and may carry a heavy financial burden due to health care costs and related expenses<sup>10,11</sup>. It has also been suggested that health issues have an impact on marital relationships and parent-child relationships, bringing about, among others, conflict or lack of motivation to change among patients<sup>12,13</sup>. This, in essence, indicates that poverty and physical and mental health are all closely associated with each other, suggesting that income inequality is an important predictor of health status.

In terms of health services utilization in South Korea, a growing number of women are seek medical and/or mental health services than ever before, which has enlarged gender differences in healthcare-seeking behaviors. Compared to men, women are often more willing to engage in health-related behaviors. Based on a preliminary analysis using the Korea Health Panel (KHP) survey's 2011 data, more women sought medical attention than did men. Given the link between physical and mental health, as well as the higher prevalence of depression among women, as compared to men, it is crucial that we understand how income and limited access to health care can affect their mental health status. This is particularly true for women, especially with financial and medical problems. Therefore, this study examined the roles played by income, frequency of daily malfunctions due to limited access to health care, and frustration in married women's subjective evaluation of their depression and anxiety. Statistically, we aim to identify a path that can illustrate how these factors are linked with each other in a way that results in mental health issues. Given that elderly population is dramatically growing in Korea, with females living on average 10 years longer on than men, the findings of this study are anticipated to have implications for both policy and practice in promoting healthy lifestyles among adult members of low-income families.

## 2. Methods

### 2.1 Structural Equation Modeling

In Structural Equation Modeling (SEM), the model is the centerpiece of the study, as the statistical analysis primarily functions as a key method for evaluating the usability of the proposed model. The current study employed a confirmatory approach, aimed at facilitating our under-

standing of the roles played by income, the frequency of problems in daily functioning due to limited access to health care and frustration in married women's subjective evaluation of their depression and anxiety. The study made a priori assumptions relating to whether low income, the prevalence of daily functioning concerns that are associated with unmet medical needs, and high frustration levels lead to depression and anxiety. The limitations of secondary data analysis (i.e., making use of variables forming part of an existing data set, which have already been assigned a fixed operationalization) prevented the diagnosis of depression and anxiety. However, given the limited literature facilitating an understanding of the link between unmet medical needs, psychological distress and mental health, this study could make significant contributions to existing literature.

## 2.2 Hypothesized Model

Key variables included in the model were household income, the frequency of daily malfunctions that are associated with limited access to health care, frustration and mental health, which is operationalized as depression and/or anxiety (Figure 1.), controlling for education level.

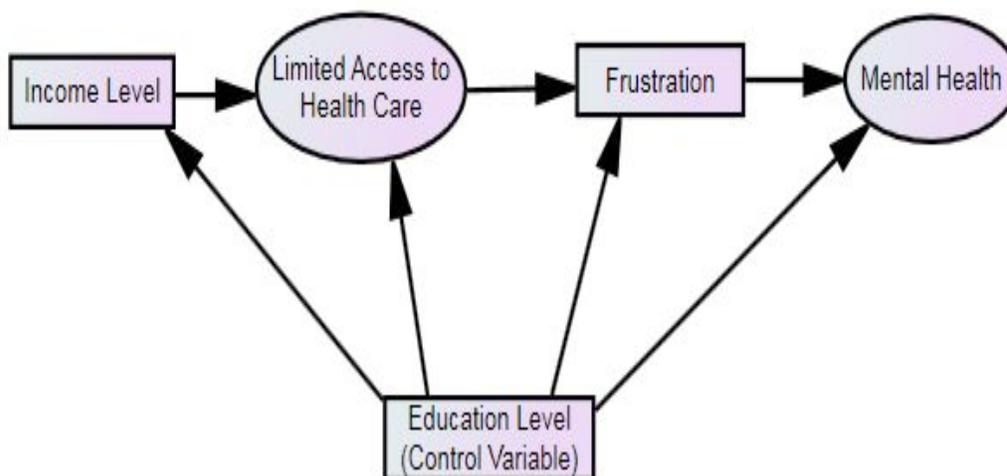
## 2.3 Data Description

This study used the KHP survey's 2011 data as secondary data. The main advantage associated with the use of this

data set is the fact that the sample was selected through stratified random sampling, thereby including individuals of all ages and various socioeconomic statuses, so as to ensure representativeness. In addition, the use of this data set enabled the collection of information on the types and under- or over-utilization of medical services. The data also provide information on the extent of limited access to health care, especially the types of medical conditions for which individuals do not seek help, even though these warrant medical attention. However, this data set did not enable the collection of detailed information on mental health. Respondents were asked to subjectively rate their overall life satisfaction and the severity of their depression or anxiety and to report any depressive episodes that they had at the time or had had in the previous 12 months, with an episode having lasted for at least two weeks and the condition interfering or having interfered with daily life. Other inquiries on mental health statuses included the frequency of respondents' experiences of frustration.

Experiences of limited access to health care were operationalized as the manner in which problematic respondents felt about (or perceived) the effects of their medical/dental problems on their daily lives, due to their inability to seek medical services.

The total sample size included in the analysis was 2,764 participants. Of the 3,720 married women in the data set, aged 25–65 years, we excluded 144 individuals without children and 812 respondents with missing data



**Figure 1.** Hypothesized model.

for variables that are relevant in our model. The average age of the respondents was 46 years (SD = 9.42), with the majority having completed high school or higher education (74.1%, n = 2,048). Individuals whose household income was lower than the 60% median income made up 44% (n = 1,215) of the total sample.

### 2.4 Data Analysis

The hypothesized model of this study was assessed mainly through the following fit indices: Chi-square statistics (CMIN), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). Since the chi-square statistic is sensitive to sample size, with larger samples typically producing a significant chi-square statistic, regardless of whether the model shows a good fit to the data, the CFI and the RMSEA were used for supplementary purposes. The CFI is based on the comparison between the hypothesized model and the baseline model and ranges from 0 to 1. A CFI exceeding .9 is ideal, with values of .95 or higher considered to demonstrate an excellent fit<sup>14</sup>. According to Browne and Cudeck<sup>13</sup>, RMSEA values of less than .05 indicate a good fit, whereas those between .05 and .08 indicate a moderate fit.

### 3. Results

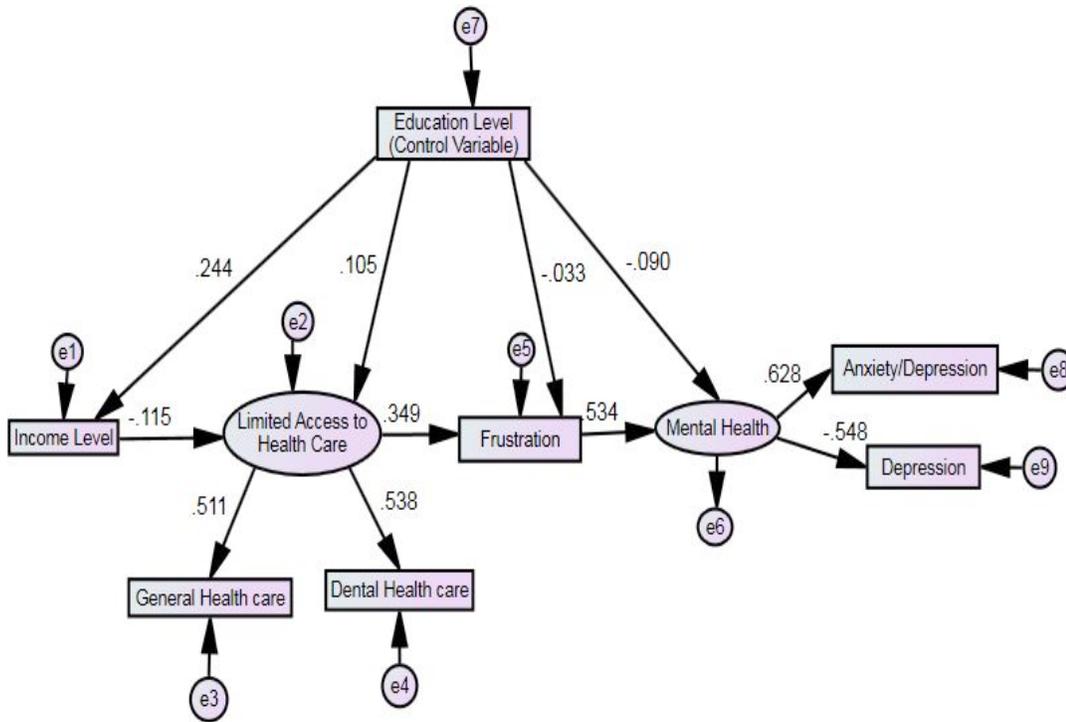
The results showed a consistent, satisfactory model fit [Model  $\chi^2(10) = 71.953, p < .01, CMIN/df = 7.1953, CFI = .956, TLI = .907, NFI = .949, RMSEA = .047$ ]. The CFI value obtained in the current study was .956, indicating that the hypothesized model adequately represents the data. The RMSEA value was .047, which also indicates a good fit (< .05). Other fit indices such as the Tucker-Lewis Index (TLI) and the Normal Fit Index (NFI) also supported the notion of a good fit. The significant path coefficients are shown in Table 1 and Figure 2., indicating the final model.

As shown in Figure 2., a negative relationship was identified between income and the frequency of daily functional issues associated with limited access to health care ( $\beta = -.115, p < .05$ ), and positive relationships were found between daily functional issues associated with limited access to health care and experiences of frustration ( $\beta = .349, p < .05$ ) and between experiences of frustration and mental health (indicated by anxiety and depression) ( $\beta = .534, p < .05$ ). These results indicate that the lower the income, the higher the likelihood of married women experiencing daily functional issues associated

**Table 1.** Path coefficients

Paths	Path coefficients		S.E.	p
	Standardized	Unstandardized		
Income → Limited health care issue	-.115	-.069	.018	***
Limited health care issue → Frustration	-.334	-.339	.041	***
Frustration → Mental health	.534	-.140	.007	***
Limited health care issue → General health	.511	1.028	.126	***
Limited health care issue → Dental health	.538	1.000		
Mental health → Depression/Anxiety	.628	1.000		
Mental health → Depression	-.548	-.598	.041	***

\*\*\*p<0.001



**Figure 2.** Final model.

with unmet medical needs and, in turn, experiencing frustration, which subsequently affects their subjective evaluation of their mental health status. This means that their level of anxiety and/or depression increased due to increased frustration resulting from unmet medical needs.

## 4. Conclusions

While there are various studies on help-seeking behaviors, as well as health service utilization among men and women, there is limited research aimed at facilitating our understanding of the manner in which lack of income and daily functional issues resulting from unmet medical needs affect individuals' mental health. In this regard, this article provides a preliminary understanding of the way in which income and unmet medical needs can increase the risks of mental health problems among married women.

The findings of this study suggest that the lower the income, the higher the likelihood of married women experiencing frustration and daily functional issues associated with unmet medical needs. This also subsequently elevated their anxiety and/or depression levels. This is

not surprising, as lower income is associated with poor health, which suggests an association between poverty and physical as well as health, respectively. In fact, individuals with lower household income are at greater risk to experience mental illness, as supported by findings on TANF recipients' mental health needs<sup>16</sup>. That is, there is an interaction between poverty and mental illness, thus making it even more difficult to deal with either or both problems, which then only exacerbates the situation than as is<sup>17</sup>. Also, having a mental illness is also an obstacle for gaining financial independence, as their circumstances are significantly impacted by their mental illness conditions. Therefore, having mental and behavioral health issue are major barriers to having successful independence or self-sufficiency among beneficiaries of national basic livelihood<sup>18,19</sup>. As discussed in the earlier section, our findings echo the high prevalence of multimorbidity between chronic disease(s) and mental health among low-income individuals<sup>7</sup>.

Although there are limitation of this study, in that the main drawback of conducting secondary data analysis in this particular study was the fact that the survey items were not designed to specifically answer the current

study's research questions. For instance, two questions pertaining to mental health were inquiries about their perceived severity of respondents' anxiety and/or depression and whether or not they had experienced depression within the previous 12 months, with an episode lasting at least two weeks and with the condition interfering with daily life. Given the fact that anxiety and depression are mutually exclusive disorders yet both can occur simultaneously and that the relevant questions are too limited to lead to any assumptions about the disorder or clinical diagnoses thereof, the construct of mental health could have been somewhat arbitrarily measured. Hence, the quality of the research depended on the information provided in the secondary data, such as the accuracy and adequacy of measurements, especially with regard to the degree to which the indicator items clearly measure the core concept of each latent variable specified in the current study.

Nonetheless, this study has certain implications, including the need to pay greater attention to low-income families, particularly their ability to meet their medical needs, as this would prevent the deterioration of their mental health. Above all, the government ought to engage in strategic planning involving the identification of risk factors associated with physical health and mental health, in order to address health inequalities.

It is recommended that future studies identify more reliable mental health indicators (e.g., CES-D in the measurement of depressive levels), to enable a clearer understanding of the impact that income and access to physical health care in the examination of the relationship between poor health and mental health. Other suggestions include testing the same model with a male population, in order to explore any gender similarities or differences.

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