

Gender Disparities in the Limited Access to Health Care and the Impact Thereof on Mental Health

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Abstract

One of the major reasons as to why Korean adults fail to seek medical attention is their concerns with medical expenditure. However, delayed medical treatment leads to more serious problems, contributing towards individuals' limited ability to perform daily functions, which could also result in psychological distress, frustration, and care burden. In our previous study, we learned that the lower the income, the more frequently married women are likely to experience frustration and problems with daily function, due to unmet medical needs, and in turn, experience depression and anxiety issues. In the current study, the focus was on exploring possible gender disparities with regard to the impact of limited health care on mental health. This hypothesis was based on the fact that gender differences are often alluded to in health-care seeking behaviors. This study examined whether or not our model, which is based on data from female respondents, fits the data from male respondents. Based on a secondary analysis of the Korea Health Panel (KHP) survey's 2011 data, this study tested a Structural Equation Model (SEM) involving income, problems with daily function, depression and anxiety experiences, which were relevant to Korean women, while controlling for subjects' education level. The sample included 3,340 married men between the ages of 25 and 65 years. The results showed that our previous model, which was based on the data obtained from women, did not fit well with the male respondents' data. However, upon taking further steps to identify the best fitting model, the exclusion of the frustration factor, resulting from unmet medical needs, led to a better fit [(Model χ^2 (6) = 24.877, $p < .01$, CMIN/df = 4.146, CFI = .995, RMSEA = .031)]. This means that, the lower the income, the more likely (or frequently) married men are to experience daily functional issues associated with unmet medical needs, which in turn, directly affects their subjective depression and/or anxiety. Similar to the study on women, we suggest that the Korean government actively address low-income families' (including both men and women) ability to keep up with their medical needs, to further prevent the deterioration of their mental health.

Keywords: Gender Differences, Health, Income, Mental Health

1. Introduction

Unfortunately, individuals from low-income backgrounds are more likely to experience medical and mental health issues than their high-income counterparts' are¹. As compared to their counterparts, the combination of the medical needs and mental problems experienced by these individuals occur 10 to 15 years earlier¹. However, their medical needs are the least of their concerns when they have to make ends meet during economic hardships. This is mainly because, for low-income families, medical services are directly

responsible for the financial difficulties that they experience. This is not to mention the fact that low-income families' insurance coverage is usually not equivalent to that of the affluent. As a result, individuals from low-income backgrounds are reported to simply bear the pain, which results in less of their medical needs being met than those of the affluent population²⁻⁵. Given the fact that unmet medical needs are linked to quality of life⁶, coupled with the rapidly growing have-not populations in South Korea, the rate of medical and mental needs is expected to rise, thereby significantly decreasing the have-not populations' life satisfaction.

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Poverty and physical and mental health are all closely associated with each other, suggesting that income inequality is an important predictor of health status⁵. Various forms of negative affect can result from poor physical health, especially when individuals are in great pain. These may include stress, frustration, depression, anxiety, tension, and feelings of helplessness. Individuals with chronic diseases, immobility, and conditions involving a considerable amount of pain are at a high risk of leading restricted lifestyles, which could result in stress or frustration^{7,8}. Their families may also experience care burden, including stress, financial problems, frustration, and loneliness^{9,10}. Health issues might also affect marital relationships or parent-child relationships, in the form of, for instance, conflict or patients' lack of motivation to change^{11,12}. Besides income, gender differences are often noticed in healthcare-seeking behaviors. Individuals' health information behaviors, referring to how they seek, obtain, evaluate, categorize, and use relevant health-related information to perform desired health behaviors, are a critical criterion for appropriate and consistent engagement in these behaviors. With respect to gender, it has been noted that, as compared to women, men are often unwilling or lack the motivation to engage in health-related behaviors. In fact, in South Korea, more women are seeking medical and/or mental health services than ever before. However, based on a preliminary analysis using the Korea Health Panel (KHP) survey's 2011 data, men's stay in a medical care facility was suggested to be, on average, longer than that of women, whereas more women sought medical attention than did men. In our previous research, we learned that the lower the income, the more likely married women are to experience problems with daily functions, due to unmet medical needs. This, in turn, led to more frequent experiences of frustration, which subsequently affected the women's subjective evaluation of their mental health status¹³. In other words, the women's anxiety and/or depression levels were likely to increase, due to greater frustration. This resulted from the unmet medical needs primarily caused by income inequality. Since men are less likely to seek professional help than women are, especially with regard to both physical and mental care, the possibility of whether or not the impact of income and limited access to health care on mental health (as seen among women) applies equally to men is worth exploring. This study examined whether our previous model is also applicable to married

men. If different, then the aim was to identify the best fitting model that can explain the impact of limited access to health care on married men's mental health. The findings of this study are anticipated to have implications for both policy and practice, with regard to the promotion of healthy lifestyles among 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 strength of conducting an SEM is the fact that it involves an analytical approach that enables researchers to evaluate the usability of a hypothesized model containing latent constructs and to test a path model. The current study took two distinct approaches. One was a confirmatory approach, aimed at facilitating our understanding of the roles played by income, the frequency of problems in daily functioning, due to limited access to health care, and the frustration of married men, as demonstrated by their subjective evaluation of their depression and anxiety. To accomplish this, a secondary data analysis was conducted. The other approach involved conducting post hoc modifications, so as to determine the best fitting model, in case the first approach fails (i.e., if the testing model does not fit well with the data on men), by moving around the key variables that best fit the married men's data. Similar to our previous research, 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 depression and anxiety diagnoses. However, given the limited literature facilitating an understanding of the link between unmet medical needs, psychological distress, and mental health among men, 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. The study controlled for education level.

Figure 1 depicts the theoretical framework that guided this research, whereas Figure 2 shows the model involving data from female respondents (finalized in our previous study¹³), consisting of latent constructs and indicators which we tested using data from the male respondents in this study.

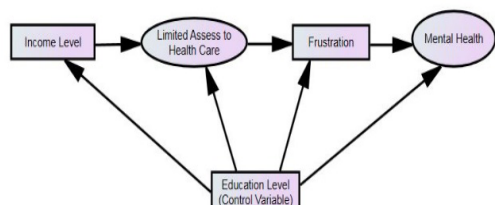


Figure 1. Hypothesized model.

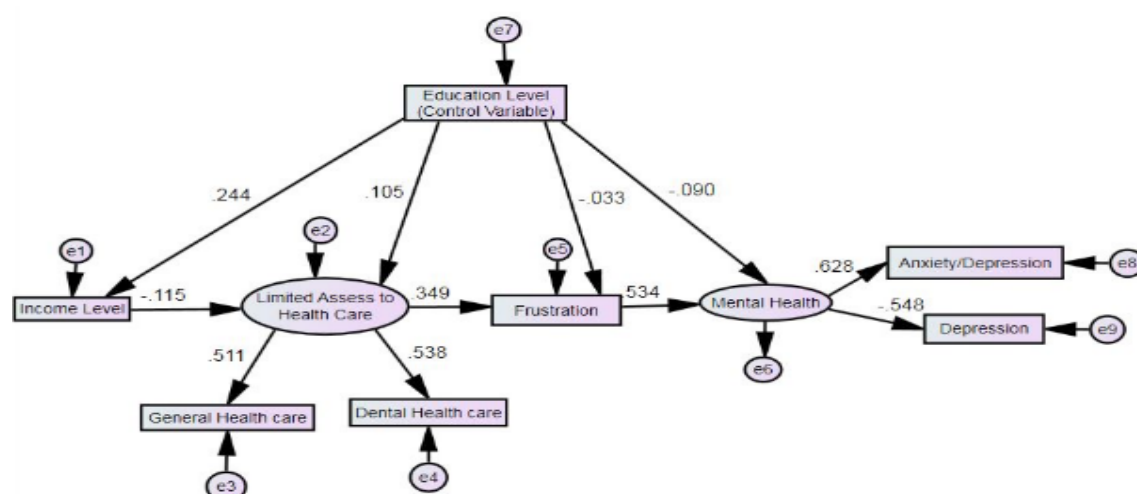


Figure 2. Model involving female respondents' data (Kang & Sohn, 2015, In review).

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 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 3,340 participants. These men were aged between 25 and 65 years and were married, with children. The average age of the respondents was

47.9 years (SD = 9.1). Approximately half of the respondents had completed high school or higher education (43.2%, $n = 1,442$). Those whose household income was lower than the 60% median income made up 46% ($n = 1,503$) of the total sample. The age and income statuses of these men were similar to those of the married women in the same 2011 KHP data (i.e., mean age = 46 years, SD = 9.4; with a household income lower than the 60% median 44%); however, more women than men had acquired tertiary education (74 % vs. 43%).

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 fit¹⁴. According to Browne and Cudeck¹⁵, RMSEA values of less than .05 indicate a good fit, whereas those between .05 and .08 indicate a moderate fit.

3. Result

Initial testing of the model involving female respondents' data did not indicate a good fit with the data from male respondents, mainly because the RMSEA value was .079, which does not suggest a good fit. Therefore, the next step was to explore the data from female respondents, by modifying the necessary variables, so as to find the best fitting model for male respondents' data. As a result, a new model was identified, showing satisfactory model fit indices [Model χ^2 (6) = 24.877, $p < .01$, CMIN/df = 4.146, CFI = .995, TLI = .983, NFI = .994, RMSEA = .031]. This final model, shown in Figure 3 and comprising significant path coefficients, was obtained by removing the "frustration experience" variable from the model involving data from female respondents.

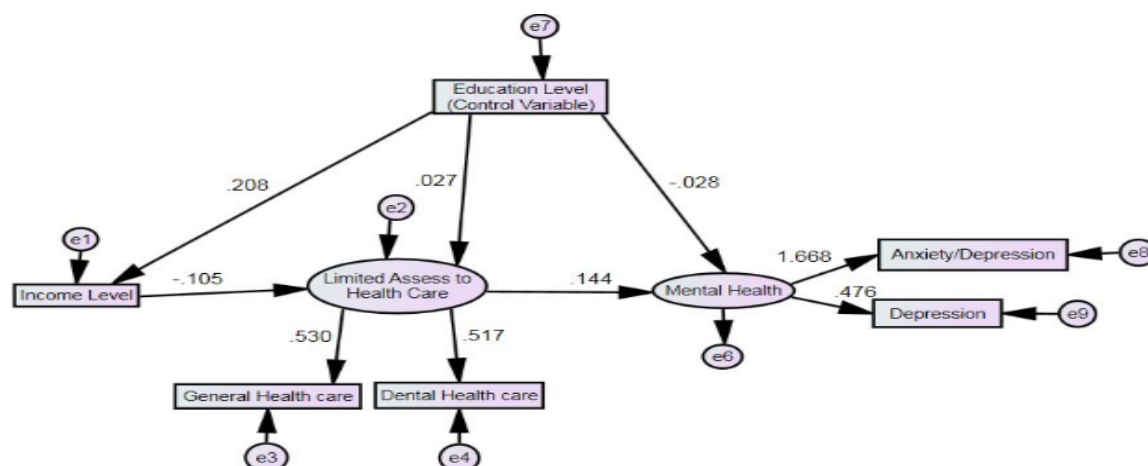


Figure 3. Final model.

As shown in the final model, a negative relationship was identified between income and the frequency of daily functional issues associated with limited access to health care ($\beta = -.105$, $p < .05$), and a positive relationship was found between daily functional issues associated

with limited access to health care and mental health (operationally defined as anxiety and depression) ($\beta = .114$, $p < .05$). Unlike the model based on female respondents' data, the unmet medical needs were directly associated with depression and/or anxiety, although the standardized path coefficients were too small to suggest a strong association between the factors. These findings indicate that the lower the income, the more frequent are married men's experiences of daily functional issues associated with unmet medical needs, which, in turn, is associated with a higher likelihood of depression and/or anxiety.

4. Conclusion

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, in addition to our findings on married women, enables a preliminary understanding of the way in which income and unmet medical needs can increase the risks of mental health problems.

The findings of this study suggest that the lower the income, the higher the likelihood of married men experiencing problems with daily functions associated with unmet medical needs, which could subsequently

elevate their anxiety and/or depression levels. This is not surprising, as income level is also associated with poor health, which may suggest an association between poverty and mental health and physical health, respectively. Moreover, poor health can also affect mental health.

As with our study on women, the main drawback of conducting secondary data analysis in this 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 the 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 and that the relevant questions were too limited to lead to any assumptions about the disorders or clinical diagnoses thereof, the construct of mental health was somewhat arbitrarily measured. Hence, the quality of the research depended on the information provided in the secondary data, 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. It is recommended that future studies identify more reliable mental health indicators (e.g., Center for Epidemiologic Studies Depression Scale (CES-D) in the measurement of depressive levels, or clinical diagnoses, as described in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V)), to enable a clearer understanding of the impact of income and access to physical health care on the examination of the relationship between poor health and mental health. Nonetheless, this study certainly has implications, including the Korean government to actively address low-income families' (including both men and women) ability to keep up with their medical needs, to further prevent the deterioration of their mental health. In order to address health inequalities, a strategic planning at the governmental level is suggested, involving the identification of risk factors associated with physical health and mental health.

5. References

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