A Study on the Job Stress and Mental Health of Caregivers

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Abstract. Purpose: This study aims to determine the level of job stress and mental health of caregivers, predict negative factors for mental health, and provide basic data to develop mental health problem prevention programs.

Methods: This is a descriptive research using a structured questionnaire among 337 caregivers. The general and work characteristics of the caregivers were determined and the level of job stress and mental health was examined. The predictors of mental health, as well as the correlation between job stress and mental health, were analyzed.

Result: Frequent shift in working hours (p=0.018) and discrimination in pay and treatment (p=0.001) led to significantly higher levels of job stress. Caregiving motivated by basic livelihood (p=0.003) and monthly average wage ≥1.5 million won (p<0.001) led to poorer mental health. The factors affecting mental health included colleague stress (p<0.001), work stress (p=0.002), discrimination in pay and treatment (p=0.001), ≥6 patients in charge in the nighttime (p=0.033), and a monthly average wage of 1 million to <1.5 million won (p=0.048).

Conclusion: This study is significant in that it has empirically identified the factors related to the mental health of caregivers, such as work stress, colleague stress and treatment, and workload.

Keywords: caregiver, job stress, mental health

1 Introduction

Caregivers are not professional healthcare providers but they work as medical assistants closest to patients and serve as a link to patients’ families; therefore, they are essential in the healthcare system. Their job is to give care to patients who need assistance or who have no capability to do routine, regularly repeated, basic activities, such as eating, putting on clothes, and bathing, due to mental and physical disabilities [1]. The importance of this study, aiming to give an extensive understanding of the job stress and mental health of caregivers for inpatients, is ultimately associated with the qualitative aspect of caregiving service or the quality of caregiving for inpatients. While there were studies on caregivers’ job stress and job satisfaction [2], on turnover intention [3, 4], on work stress and self-efficacy [5], and on the correlation between...
the job stress and mental health of caregivers [6], research on job stress and the factors affecting the mental health of caregivers was hardly found. This study aimed to determine caregivers’ job stress and mental health status and the factors affecting them and provide basic data to develop effective and systematic interventions that enable caregivers to relieve their job stress and maintain good mental health.

2 Method

2.1 Design and Objective

This is a descriptive research to determine caregivers’ job stress and mental health status and predict the factors negatively affecting their mental health.

2.2 Subjects

This study was conducted among caregivers, who give care for pay at hospitals. The research was conducted at three rehabilitation hospitals—G, B, and M Rehabilitation Hospitals with ≥200 beds—in S City. 210 subjects were required at the significance level of (α)=.05 with the median effect size at .15 and testability (1- ß) at .80 using the G*Power 3.12 program [7]. The caregivers who understood the goal of the research and participated spontaneously in the research were asked to give a written consent. Of 385 questionnaires distributed, 371 copies (96.3%) were returned and 337 (87.5%) were finally analyzed, with the exception of 34 with no response or insincere responses.

2.3 Instruments

1) Job Stress

The adaptation of the instrument applied to caregivers by Lee [3] was used with items appropriate for this study. The questionnaire was composed of a total of 26 items: 8 concerning work, 7 concerning patients, 4 concerning colleagues, 4 concerning guardians, and 3 concerning financial matters. Each item was measured in a 5-point Likert scale (0 for totally disagree to 4 for totally agree), with a higher score meaning a higher level of job stress. The reliability of the instrument was estimated to be Cronbach's α=.93.
2) Mental Health

The Symptom Check List-90-Revision (SCL-90-R), which is the re-standardization by Kim and Kim [8] on the basis of the self-administered mental health scale, developed by Derogatis [9] to include multi-level, psychiatric, and clinical symptoms, was used. It is a self-administered scale composed of a total of 90 items—somatization (12 items), obsession (9), interpersonal sensitivity (9), depression (13), anxiety (10), hostility (6), fear (7), paranoia (6), neurosis (10), and additional items in 9 sub-areas. Each item was measured in a 5-point Likert scale (0 for not serious at all to 4 for very serious), with a higher score meaning more problems with mental health and being more psychologically maladaptive. Reliability of the instrument was estimated to be Cronbach's $\alpha= .98$.

2.4 Data Analysis

An SPSS WIN 20.0 program was used to analyze data as follows:
1) The subjects’ job stress and mental health were expressed in the mean and standard deviation.
2) The subjects’ job stress and mental health status by their general and job characteristics were analyzed using t-test, ANOVA, and Sheffe's posttest.
3) The association between job stress and mental health of the subjects was analyzed using Pearson correlation coefficient.
4) The factors affecting the subjects’ mental health were analyzed using stepwise multiple regression analysis.
5) Every test was performed at the $.05$ significance level.

3 Results

The subjects scored 47.16 on average for job stress (possibly ranging from 0 to 104 and actually ranging from 0 to 99) and 61.88 on average for mental health (possibly ranging from 0 to 360 and actually ranging from 3 to 256). Frequent shift in working hours led to higher levels of job stress than day duty ($p=0.018$) while care-helper certificate acquisition due to discrimination in pay and treatment led to higher levels of job stress than others ($p=0.001$). Caregiving motivated by basic livelihood led to lower levels of mental health compared to by leisure ($p<0.003$), with the mean wage $\geq 1.5$ million won leading to lower levels of mental health than $<1$ million won or $1$ million to $<1.5$ million won ($p<0.001$), $\geq 6$ patients in charge in the nighttime leading to lower levels of mental health than 0 ($p=0.037$), and care-helper certificate acquisition due to discrimination in pay and treatment leading to lower levels of mental health compared to professional caregiving service, worth, or others ($p<0.001$).

Mental health was significantly positively correlated with gender ($p=0.007$), age ($p=0.045$), monthly average wage ($p<0.001$), the number of patients in charge in the nighttime ($p=0.015$), mean working duration ($p=0.023$), experience of being injured ($p=0.017$), certification ($p=0.013$), causes of certificate acquisition ($p=0.024$),
caregiving motivation (p<0.001), job stress (p<0.001), and each of the five sub-areas of job stress (p<0.001).

As for multicollinearity to analyze the factors affecting mental health, the score of tolerance ranged from 0.540 to 0.991, meaning the absence of problem with multicollinearity; meanwhile, the Durbin-Watson test found that residual was 1.760, close to 2, meaning the absence of autocorrelation among error terms of the model. As for the correlation among the factors significantly affecting mental health, no explanatory variable scored ≥0.6, demonstrating that independent assumptions among independent variables were satisfied. The regression analysis model was found to be significant (F=23.261, p<0.001), with explanatory power estimated at 32.3%. The factors affecting mental health included colleague stress (p<0.001) and work stress (p=0.002) among the sub-areas of job stress and causes of certificate acquisition (discrimination in pay and treatment) (p<0.001), the number of patients in charge in the nighttime (≥6) (p=0.033), and monthly average wage (1 million to <1.5 million won) (p=0.048) among the general characteristics.

4 Conclusions

The factors affecting the mental health of caregivers included work stress, colleague stress, pay and treatment, and the number of patients in charge in the nighttime. On the basis of these results, it is necessary to develop interventional programs to prevent and manage job stress and mental health problems for caregivers. Further research should be conducted on the effects of caregivers’ job stress and mental health status on caregiving for patients.

This study has some limitations: a simple mental diagnosis scale, SCL-90-R, was used in the subjects scoring in the normal range instead of screening those with abnormal mental health, getting a wide range of scores and standard deviation. Better or poorer mental health was determined among those scoring in the normal range. Further research should be conducted using SCL-90-R to screen a mental health clinical group and a mental health borderline group and determine inter-group differences.

Reference

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