Resilience, Coping Styles, Sleep Disturbances, Depression and Anxiety in Females With Breast Cancer

CY Huang¹, PhD, RN, CM Hung², MD, HL Lai³, PhD, RN, C-I Chen⁴, PhD, Shu-Yun Tu⁴, PhD, RN, YuChun Yao¹, EdD, RN, ML Shih², MSN, RN

¹Shou University, Taiwan; ²E-Da Hospital, Taiwan; ³Tzu Chi University, Taiwan; ⁴MeiHo University, Taiwan

Purpose

● Influences of resilience on the presence and severity of depression and anxiety following diagnosed breast cancer are largely unknown. Hence, we examined 1). the factors that may enhance and promote resilience in adults with breast cancer; 2) the mediating effects of resilience or three coping styles on depression, anxiety, and sleep disturbances in females with breast cancer were also examined.

Results

● The average age of the participants was 52 years (± 8.9), the mean time since diagnosis of breast cancer was about 22 months, and most females were married. The majority of participants were satisfied their relationship with their couples. For the prevalence of negative health problems of the participants, about 70% with sleep disturbances, 55% had depressive symptoms, and 27.4% had anxiety symptoms. All three coping styles were negatively correlated with depressive symptoms, but only active coping significantly correlated with sleep disturbances.

● For SEM, the best fitted structural equation modeling included individual demographics and disease characteristics, coping, and resilience as significant predictors of depression, anxiety, and sleep disturbances; moreover, with resilience acting as a mediator in these relationships. Patients’ characteristics and coping both contributed indirect effects on depressive symptoms via resilience. Education, income, and satisfaction of relationship were influential components of an individual’s construct affecting resilience on depression, anxiety, and sleep disturbances.

Conclusions

● Disease characteristics and coping both exerted direct and indirect effects on depression/anxiety/sleep disturbances via resilience. If people with breast cancer have used more active and minimizing coping style, it seems that they were more likely to report less depressive symptoms.

Methods

● A cross-sectional, descriptive correlational design was employed. A convenience sample of 175 females with breast cancer was recruited from two general hospitals in Taiwan. Face-to-face, structured interviews were employed to collect information. Study questionnaires included a demographic sheet, disease characteristics, the Pittsburgh Sleep Quality Index, the modified Resilience scale, and the Hospital Anxiety and Depression scale.

● Using the structural equation modeling (SEM) technique analyzed all relationships among factors, mediators, and health outcomes. AMOS 19.0 was used to examine the structural equation modeling approach.

Figure 1. A path model with standardized weights

Resilience of females with breast cancer
Specification: standardized estimates
X²/df = 0.73; GFI = .99 AGFI = .95; RMSEA = .00

Note: M_relation_5: Satisfaction of marital relationship ; SDs; Sleep disturbances; ACoping: Active coping; ECoping: Escape coping; MCoping: Minimizing coping