The paths of social support, resilience, and emotional distress on quality of life in patients with type 2 diabetes

Ruey-Hsia Wang\textsuperscript{a}, Yau-Jiunn Lee\textsuperscript{b}, Shyi-Jang Shin\textsuperscript{c}

\textsuperscript{a}RN, PhD, Professor, College of Nursing, Kaohsiung Medical University, Taiwan.
\textsuperscript{b} MD, PhD, Department head, Lee’s Endocrinology Clinic
\textsuperscript{c} MD, PhD, Division of Endocrinology and Metabolism, Department of Internal Medicine, Kaohsiung Medical University Hospital, Kaohsiung, Kaohsiung Medical University, Kaohsiung, Taiwan.

**Background**

Quality of life is an important psychosocial outcome for patients with Type 2 diabetes. The paths of social support, resilience, and emotional distress on quality of life have been less examined, especially in Asian populations with type 2 diabetes.

**Result**

Overall, 600 patients (n=337, 56.2% males; and n=263, 43.8% females) aged 20 to 84 years with a mean of 58.25±11.37 years participated in the study. The means of social support, resilience, diabetes-specific emotional distress, and quality of life were at medium to high levels.

Enhancing social support and resilience might help to reduce emotional distress and, finally, improving the quality of life of patients with type 2 diabetes. Further longitudinal and experimental studies are required to confirm the causal relationships among social support, resilience, emotional distress, and quality of life.

**Conclusions**

To validate a hypothesized model addressing the paths of social support, resilience, and emotional distress on quality of life in patients with type 2 diabetes.

**Method**

**Design and sample**

This was a cross-sectional study. Patients with type 2 diabetes were recruited from three hospitals by convenience sampling in Taiwan.

**Measurement**

*Personal characteristics.* Age, sex, level of education, occupational status, and duration of diabetes were collected.

*Social support scale.* 16 items. Each item was rated from “never” (0 point) to “always” (4 points). Higher scores indicated higher social support. Cronbach’s $\alpha$ was 0.96 for the total scale in this study.

*Resilience scale.* 10 items. Each item was rated from “never” (0 points) to “always” (4 points). Higher scores indicated higher resilience. Cronbach’s $\alpha$ was 0.94 for the total scale in this study.

*Emotional distress scale.* 8 items. Each item was rated from “a very serious problem” (0 points) to “not a problem” (4 points). Higher scores indicated less emotional distress. Cronbach’s $\alpha$ was 0.94 for the total scale in this study.

*Quality of life scale.* 17 items. Each item was rated from “never” (0 points) to “always” (4 points). Higher scores indicated higher quality of life. Cronbach’s $\alpha$ was 0.90 for the total scale in this study.

**Data analysis**

Structural equation modeling (SEM) conducted by AMOS Version 17.0.2 was used to test the hypothesized path model. An $\alpha$ level of 0.05 was considered significant.