Factors Associated with the Quality of Life of Patients with Implantable Cardioverter Defibrillator in South Korea

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Introduction: While increasing the number of patients with Implantable Cardioverter Defibrillator (ICD) has been reported in South Korea, little is known about Quality of Life (QOL) and factors associated with the QOL for ICD recipients in Korea. The purpose of this study was to 1) evaluate the factors associated with ICD concerns and QOL, 2) compare ICD concerns and QOL according to the duration of ICD implantation and the purpose of prevention.

Methods: Descriptive survey design was applied with 109 ICD recipients who visited a university-affiliated hospital in Seoul, Korea. For measurement, questionnaires for ICD concerns, perceived control, social support, patient acceptance, and QOL were used.

Result: ICD related concerns were significantly higher in patients with one or more comorbidities (p=0.006) or in those who had experienced shock (p=0.026). QOL was significantly lower in patients with low income, low education level, NYHA class ≥2, and patients who lived alone, were unemployed, and had comorbidities. The significant predicting factors associated with lower QOL were low feeling of control (p=0.003), low acceptance of device (p=0.005), low economic status (p=0.021), and having comorbidities (p=0.030). These factors accounted 43.3% of the variance in QOL. Compared with patients within 2 year after the ICD implantation, the feeling of control was significantly improved in those 4 years after implantation (p=0.004). Compared with secondary prevention patients, primary prevention patients had higher ICD concerns and lower QOL. Secondary patients had significantly higher perceived control (p=0.022) and perceived social support (p=0.008)

Conclusion: Higher ICD related concerns and lower QOL was reported in patients within 2 years after implantation and who had ICD for primary prevention. These findings suggest that appropriate screening is needed to detect vulnerable patients with ICD and additional personalized interventions to improve QOL to these populations should be developed and provided.