

## Health-Related Quality of Life in Korean Patients with Systemic Lupus Erythematosus

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**Objective:** To assess the health-related quality of life (HRQOL) of systemic lupus erythematosus (SLE) patient, to compare the HRQOL of SLE patients with that of healthy controls, and to identify the predicting variables on physical and mental health in Korean patients with SLE. **Methods:** In this cross sectional study, the HRQOL and clinical and laboratory parameters were assessed by Short Form Health Survey-36 (SF-36), EuroQol5 Dimensions (EQ-5D), time trade off (TTO), standard gamble (SG), Centers for Epidemiologic Studies Depression (CES-D), self-efficacy scale, social support, social network, SLE Disease Activity Index (SLEDAI) and Systemic Lupus International Collaborating Clinics (SLICC)/American College of Rheumatology (ACR) Damage Index (SDI), respectively, from 111 outpatients with SLE. And the data of the SF-36 and EQ-5D in SLE patients were compared with those in 228 healthy controls. **Results:** 106 (95.5%) were women and 5 (4.5%) were men, with a mean (SD) age of 33.2 years (9.9) and mean disease duration of 7.19 years (4.59). The mean scores of SF-36 global, mental component summary (MCS) and physical component summary (PCS) were 62.28 (20.49), 67.50 (24.61), and 65.74 (24.85), respectively. The mean EQ-5D utility and visual analogue scale (VAS) score were 0.73 (0.20) and 67.51 (17.94). The mean scores of the TTO and SG were 0.60 (0.55) and 0.59 (0.45). The scores on the SF-36 global, EQ-5D utility and EQ-5D VAS in healthy controls were 77.5 (13.1), 0.73 (0.20) and 67.5 (17.94), respectively. The mean scores of CES-D, self-efficacy scale, social support, and social network were 9.09 (6.82), 66.52 (17.42), 2.53 (0.17) and 2.29 (0.46), respectively. The mean SLEDAI and the mean SDI were 5.87 (4.32) and 0.73 (1.02). The SDI was negatively correlated with the scores of SF-36 global, PCS, and EQ-5D VAS ( $r=-0.30$ ,  $p<0.001$ ;  $r=-0.34$ ,  $p<0.001$ ;  $r=-0.28$ ,  $p<0.003$ ), and positively correlated with the CES-D ( $r=0.19$ ,  $p<0.04$ ). In multivariate models, the predicting variables on SF-36 global and 6 MCS was self-efficacy, and the predicting variables on SF-36 PCS were SLEDAI and self-efficacy. **Conclusion:** In this study, we observed that HRQOL in Korean patients with SLE was lower than those in healthy control. The SF-36 and the EQ-5D were valid measurements to assess HRQOL in patients with SLE. In multivariate model, self-efficacy and SLEDAI were only meaningful variables correlated with HRQOL among variables. Therefore, to improve the HRQOL in Korean patients with SLE, we should focus on a program to improve self-efficacy.

## Health-Related Quality of Life in Korean Patients with Rheumatoid Arthritis

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**Objective:** The objective of this study is to assess the health-related quality of life (HRQOL), to examine the correlation among each measurement, and to identify the predictor for HRQOL in Korean patients with rheumatoid arthritis (RA). **Methods:** The HRQOL and clinical and laboratory parameters were assessed by Short Form Health Survey-36 (SF-36), EuroQol5 Dimensions (EQ-5D), time trade off (TTO) and standard gamble (SG) using computer software, Centers for Epidemiologic Studies Depression (CES-D), social support, self-efficacy scale, Korean Health Assessment Questionnaire (KHAQ), functional class, radiologic classification, morning stiffness, Ritchie index, erythrocyte sedimentation rate (ESR), and c-reactive protein (CRP) respectively from 100 outpatients with RA. And the data of the SF-36 and EQ-5D in RA patients were compared with those in 228 healthy controls. **Results:** Of the 100 subjects with RA, 93 (93 %) were women with mean age of  $51.7 \pm 9.8$  years. The mean years of disease onset were  $11.16 \pm 9.23$ . The mean scores of SF-36 global health (GH), mental component summary (MCS) and physical component summary (PCS) were  $51.51 \pm 20.64$ ,  $61.63 \pm 26.65$ , and  $47.10 \pm 24.15$ , respectively. The mean EQ-5D utility and visual analog scale (VAS) score were  $0.58 \pm 0.3$  and  $61.72 \pm 20.56$ , respectively. The mean scores of the TTO and SG were  $0.56 \pm 0.58$  and  $0.51 \pm 0.39$ . The SF-36 and EQ-5D scores in RA patients were significantly lower than those in healthy controls. The mean scores of 8 KHAQ disability index and visual analog pain scale were  $0.83 \pm 0.65$  and  $50.05 \pm 23.75$ , respectively. The mean scores of CES-D, self-efficacy scale, social support, and social network were  $9.67 \pm 6.76$ ,  $68.26 \pm 15.22$ ,  $2.37 \pm 0.19$ , and  $2.19 \pm 0.55$ , respectively. The KHAQ mean score was negatively correlated with the scores of SF-36 GH, MCS, PCS, EQ-5D utility, EQ-5D VAS score, social support, social network ( $r=-0.62$ ,  $r=-0.47$ ,  $r=-0.64$ ,  $r=-0.60$ ,  $r=-0.39$ ,  $r=-0.26$ ,  $r=-0.36$ , respectively, all  $p<0.001$ ), and self-efficacy scale ( $r=-0.24$  ( $p=0.02$ )), and positively correlated with the CES-D ( $r=0.61$  ( $p<0.001$ )). In multivariate models, the predicting variables of SF-36 GH were KHAQ and self-efficacy scale. The predicting variables of SF-36 MCS were age, KHAQ, and self-efficacy scale and the predicting variables of SF-36 PCS were age, income, KHAQ, and self-efficacy scale. **Conclusion:** These results suggest that HRQOL in Korean patients with rheumatoid arthritis is significantly lower than healthy control. The age, KHAQ, CES-D, self-efficacy scale were meaningful variables that was significantly correlated with HRQOL. Therefore, the efforts to improve HRQOL may be designed to improve the self-efficacy and the depression in addition to conventional treatment.