

**Research note**

**A Pilot Study on Perceived Control and Health Related Quality of Life in Patients with Acute Coronary Syndrome in Japan and the United States**

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**Abstract**

This cross-sectional pilot study tested the feasibility of a comparative study of patients with acute coronary syndrome in Japan and the United States, estimated the effect size of perceived control, and compared the strength of association between perceived control and health-related quality of life.

Patients were recruited from a university hospital in Japan and a level 1 trauma center in the United States. The two authors in Japan and a research team member in the US recruited each participant during hospitalization. Data were collected using self-report questionnaires of demographics, acute coronary syndrome symptoms, depression, anxiety, perceived control, and health-related quality of life.

Japanese participants (n=31) were older and their educational level was higher than US participants (n=10) on average. Japanese participants' perceived control was significantly lower (effect size was 0.787), although they reported higher levels of health-related quality of life in the physical functioning and social functioning domains. Necessary total sample size for liner multiple regression with five predictors was calculated to be 14. The total score of perceived control was significantly lower in Japanese patients compared with US patients after adjusting for age, gender, education and employment. In the US, lower pain ( $r=0.850$ ) and better emotional role ( $r=0.818$ ) subscales were significantly correlated with higher perceived control ( $p<0.005$ ). In Japanese patients, correlation coefficients between each item of health-related quality of life and perceived control were generally lower ( $r<0.5$ ), and were not significantly related each other ( $p>0.005$ ).

Perceived control was significantly lower in Japanese participants than US participants with large effect size. The association between perceived control and health-related quality of life with Japanese patients was not clear in this pilot study due to small sample size. Further investigation in a larger representative sample is necessary to determine whether perceived control is related to health outcomes in patients in Japan.

Keywords: control, acute coronary syndrome, health-related quality of life, cross-cultural comparison

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