

An CANONICAL CORRELATION ANALYSIS ON INFLUENCE FACTORS OF QUALITY OF LIFE IN PATIENTS WITH HEAD AND NECK CANCER BASED ON QLICP-HN QUESTIONNAIRE



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Aim

To investigate the status of quality of life and its clinical influence factors in patients with head and neck cancer.

Methods

The Quality of Life Instruments for Cancer patients-Head and Neck cancer questionnaire (QLICP-HN) was used to measure 91 inpatients with head and neck cancer at Yunnan tumor hospital, the clinical objective index and demographic variables data were collected.

The t test and factor analysis of variance were used to compare score differences of quality of life over different levels of factors.
 The canonical correlation analysis was used to reveal the relationships among them.

Results

The total score of quality of life in the patients was 64.34 ± 12.70 , and the four domains scores of physical, psychological, social, symptoms and side-effects were 49.88 ± 20.50 , 67.19 ± 15.94 , 64.24 ± 16.26 , 71.78 ± 14.32 and 65.44 ± 14.37 respectively.
 One canonical variable of the canonical correlation was statistically significant ($F=1.63, P<0.05$), with canonical coefficients being 0.69. The results are shown in table1.

Table1. The correlation coefficient with the canonical variables and the original variables of objective indicators and all areas of QLICP-HN

VARIABLE	NAME	V1	VARIABLE	NAME	U1
X ₁	Gender	0.327	Y ₁	Physical	0.214
X ₂	Operation	-0.006	Y ₂	Psychological	0.440
X ₃	Levels of Education	0.501	Y ₃	Social	0.239
X ₄	Family Economy	0.266	Y ₄	Symptoms and Side-effects	-0.229
X ₅	Health Insurance Mechanism	-0.485	Y ₅	Specific Module	0.556
X ₆	Weight	0.022			
X ₇	Body temperature	-0.032			
X ₈	Blood Pressure	0.219			
X ₉	Red Blood Cell	0.082			
X ₁₀	NEUT	-0.327			
X ₁₁	Total Protein	0.030			
X ₁₂	Serum Albumin	0.322			
X ₁₃	Glutamic-oxalacetic Transaminase	-0.317			
X ₁₄	Serum Potassium	0.126			

Conclusions

The quality of life in head and neck cancer patients was related with some demographic and clinical factors with small explanation contributions. Giving positive attention to these indexes and taking corresponding measures have certain value to improve the quality of life.

