Purpose/Objectives: To derive symptom clusters and their clinical meanings in Chinese patients with primary liver cancer (PLC), to examine the factors related to the identified symptom clusters, and to validate the impact of the identified symptom clusters on patients’ quality of life (QOL).

Design: Cross-sectional.

Setting: Inpatient departments at a medical center for hepatobiliary disease in China.

Sample: 277 patients with PLC, aged 18–77 years.

Methods: Data were collected from a number of measures, including demographic and disease characteristics, the MD Anderson Symptom Inventory, six additional symptom items specific to PLC, and the Functional Assessment of Cancer Therapy–Hepatobiliary questionnaire. Factor analysis was used to derive symptom clusters, independent-samples t test or one-way analysis of variance was performed to identify the factors related to each symptom cluster, and multivariate regression models were applied to examine the predictive impact of the identified symptom clusters on PLC.

Main Research Variables: Demographic and medical variables, symptom clusters, and QOL.

Findings: Three symptom clusters were identified: gastrointestinal sickness, neuropsychological, and liver dysfunction. Patients who received liver protection treatment, received more than one kind of treatment, and had poorer physical performance, worse liver function, and more advanced cancer scored higher in severity across all three symptom clusters. All of the symptom clusters explained 48% of the QOL variance, and the liver dysfunction symptom cluster (adjusted R² = 0.425) showed a superior influence.

Conclusions: The liver dysfunction symptom cluster may be unique to Chinese patients with PLC. Patients with certain demographic and disease characteristics could be at risk for experiencing severe symptom clusters. In addition, a differential impact of the symptom clusters on QOL was noted in these patients.

Implications for Nursing: The factors related to severity should be considered when managing symptom clusters. Because the predictive impacts of the three individual symptom clusters on QOL were varied and ordered in magnitude, healthcare providers should first alleviate the primary symptom cluster. This approach could be cost-effective and improve QOL.