

## ABSTRAK

**Latar Belakang:** Geriatri mengalami proses penuaan yang melibatkan perubahan molekuler dan seluler sehingga terjadi perubahan fisiologi. Perubahan tersebut menyebabkan munculnya komorbid yang diderita oleh 44% geriatri di Indonesia, seperti hipertensi, diabetes mellitus, penyakit obstruksi paru kronis, dan lainnya. Kondisi perubahan saat usia lanjut dan faktor komorbid mempengaruhi kualitas hidup seseorang, terutama pada populasi geriatri. Hal ini menjadi tantangan tersendiri bagi praktisi medis yang akan melakukan prosedur anestesi. Kualitas hidup merupakan ukuran penting dalam menilai keberhasilan penanganan pasien, terutama pasien geriatri dengan komorbiditas yang menjalani prosedur anestesi dan operatif.

**Tujuan:** Mengetahui hubungan antara kondisi komorbid dengan kualitas hidup pasien geriatri yang menjalani prosedur anestesi di RSUP Dr.Sardjito.

**Metode:** Penelitian observasional retrospektif dilakukan terhadap data sekunder pasien geriatri yang menjalani tindakan Anestesi di RSUP Dr Sardjito Yogyakarta pada Februari-April 2021. Kualitas hidup diukur dengan instrumen WHOQoL-BREF Indonesia, sementara komorbiditas dengan instrumen *Charlson Comorbidity Index* (CCI). Hubungan antara CCI dan WHOQoL-BREF dianalisis menggunakan uji *chi-square*, sementara analisis multivariat dilakukan menggunakan regresi logistik. Analisis ROC juga dilakukan untuk menentukan *cut-off point* optimal skor CCI dalam memprediksi buruknya kualitas hidup.

**Hasil:** Grafik ROC menunjukkan *cut-off* skor CCI=1 dengan sensitivitas 64,4% dan spesifisitas 58,0% dapat memprediksi WHOQoL-BREF <60, namun dengan kemampuan diskriminasi yang buruk (AUC 0,612; IK 95% 0,515 – 0,709). Komorbid CCI 1 - 2 dapat menurunkan kualitas hidup pasien geriatri post-anestesi sebesar 86,1% dibanding pasien tanpa komorbid (OR 0,139; IK 95% 0,039 – 0,498;  $p = 0,002$ ).

**Kesimpulan:** Terdapat hubungan antara komorbid dengan penurunan kualitas hidup pasien geriatri.

**Kata Kunci :** Komorbiditas, Geriatri, Anestesi, Kualitas hidup, CCI, WHOQOL

## ABSTRACT

**Background:** Geriatricians experience an aging process that involves molecular and cellular changes resulting in physiological changes. These changes have led to the emergence of comorbidities suffered by 44% of geriatricians in Indonesia, such as hypertension, diabetes mellitus, chronic pulmonary obstruction, and others. The changing conditions during old age and comorbid factors affect a person's quality of life, especially in the geriatric population. This presents a challenge for medical practitioners who will carry out anaesthesia procedures. The quality of life is a crucial indicator of the efficacy of patient treatment, particularly in geriatric patients with comorbidities undergoing anaesthesia and operative procedures.

**Objective:** to determine the relationship between comorbid conditions and the quality of life of geriatric patients undergoing anaesthesia procedures at Dr. Sardjito Hospital.

**Methods:** A prospective cohort study was conducted on secondary data of geriatric patients who underwent anaesthesia at Dr Sardjito Hospital Yogyakarta in February-April 2021. Quality of life was measured using the Indonesian WHOQoL-BREF instrument, while comorbidity was measured using the Charlson Comorbidity Index (CCI) instrument. The relationship between CCI and WHOQoL-BREF was analysed using the chi-square test, while multivariate analysis was carried out using logistic regression. A receiver operating characteristic (ROC) analysis was also conducted to identify the optimal cut-off point for the Charlson Comorbidity Index (CCI) score in predicting poor quality of life.

**Results:** The ROC graph illustrates that a cut-off score of CCI=1, with a sensitivity of 65.8% and a specificity of 57.1%, can predict WHOQoL-BREF <60. However, this has a poor discrimination ability (AUC 0.612; 95% CI 0.515 – 0.709). The presence of comorbid CCI 1-2 has been demonstrated to reduce the quality of life of post-anaesthesia geriatric patients by 86.1% in comparison to patients without comorbidities (OR 0.139; IK 95% 0.039 - 0.498; p = 0.002).

**Conclusion:** There is an association between comorbidities and a reduction in the quality of life of geriatric patients.

**Keyword:** Comorbidity, Elderly, Anesthesia, Quality of Life, CCI, WHOQOL