Preliminary Validity of the Indonesian Version of the European Quality of Life Instrument (EQ-5D-5L) in Assessing the Quality of Life of Patients with Hepatitis B

Validitas Awal instrumen *European Quality of Life* (EQ-5D-5L) versi Indonesia pada kualitas hidup penderita hepatitis B

Hasniah [a,b], Dyah Ariani Perwitasari [a]*, Woro Supadmi [a]

[a] Faculty of Pharmacy, Universitas Ahmad Dahlan, Janturan, Yogyakarta, Indonesia
[b] Faculty of Pharmacy, Universitas Islam Kalimantan Muhammad Arsyad Al Banjari, Banjarmasin Utara, Kalimantan Selatan, Indonesia.

*Corresponding Authors: dyah.perwitasari@pharm.uad.ac.id

Abstract

Health-related quality of life (HRQoL) is an important aspect in the management of chronic diseases such as hepatitis B, considering the long disease course and the risk of complications including cirrhosis and hepatocellular carcinoma. The European Quality of Life instrument (EQ-5D-5L) is widely used globally to assess quality of life; however, psychometric evidence in patients with hepatitis B in Indonesia remains limited. This study aimed to evaluate the preliminary validity and reliability of the Indonesian version of the EQ-5D-5L among patients with hepatitis B in primary healthcare settings. This study employed an observational design with a cross-sectional approach involving 42 female patients with confirmed HBsAg positivity who participated in a hepatitis B early detection program at primary health centers in Banjarmasin City between April and October 2025. Data were collected using the EQ-5D-5L questionnaire, the EQ visual analogue scale (EQ-VAS), and a demographic characteristics form. Reliability was assessed using Cronbach's alpha, while construct validity was evaluated using item–total correlation with a significance threshold of r-table = 0.304. Statistical analyses were performed using SPSS version 26. The results indicated that the EQ-5D-5L questionnaire demonstrated good internal consistency with a Cronbach's alpha value of 0.799. All items showed item–total correlations greater than the r-table value (0.304), indicating that all domains were valid. Correlation analysis revealed a significant relationship between EQ-VAS scores and the EQ-5D-5L utility index (r = 0.669; p < 0.001), suggesting adequate construct validity. Within the limitations of this study, the Indonesian version of the EQ-5D-5L demonstrates potential as a tool for measuring quality of life among female patients with hepatitis B in primary healthcare settings.

Keywords: Hepatitis B, Quality of life, EQ-5D-5L, Preliminary Validity, Reliability.

Abstrak

Kualitas hidup terkait kesehatan merupakan aspek penting dalam penanganan penyakit kronis seperti hepatitis B, mengingat perjalanan penyakit yang panjang serta risiko komplikasi menuju sirosis dan karsinoma hepatoseluler. Instrumen *European Quality of Life* (EQ-5D-5L) banyak digunakan secara global untuk menilai kualitas hidup, namun bukti psikometrik pada populasi pasien hepatitis B di Indonesia masih terbatas. Penelitian ini bertujuan mengevaluasi validitas awal dan reliabilitas instrumen EQ-5D-5L versi Indonesia pada pasien hepatitis B di layanan primer. Penelitian ini menggunakan desain observasional dengan pendekatan cross sectional yang melibatkan 42 pasien perempuan dengan HBsAg positif yang mengikuti program deteksi dini hepatitis B di Puskesmas Kota Banjarmasin periode April–Oktober 2025. Data dikumpulkan menggunakan kuesioner EQ-5D-5L, EQ-VAS, dan formulir karakteristik demografi. Uji reliabilitas dinilai menggunakan *Cronbach's alpha*, sedangkan uji validitas konstruk dievaluasi melalui korelasi item-total dengan batas signifikansi r tabel = 0.304. Analisis dilakukan menggunakan SPSS versi 26. Hasil kuesioner EQ-5D-5L menunjukkan konsistensi internal yang baik dengan nilai Cronbach's alpha sebesar 0.799. Seluruh item menunjukkan korelasi item-total yang lebih besar dari nilai r tabel (0.304), sehingga seluruh domain dinyatakan valid. Analisis korelasi menunjukkan hubungan yang signifikan antara skor EQ-VAS dan EQ-indeks utilitas (r = 0.669; p < 0.001), yang mengindikasikan adanya validitas konstruk yang memadai. Dalam batasan penelitian ini, instrumen EQ-5D-5L versi Indonesia menunjukkan potensi sebagai alat ukur kualitas hidup pada pasien perempuan dengan hepatitis B di layanan primer.

Kata Kunci: Hepatitis B, Kualitas Hidup, EQ-5D-5L, Validitas Awal, Reliabilitas.

Introduction

Hepatitis B remains a significant global health problem and continues to pose a major burden on public health. According to the European Centre for Disease Prevention and Control (ECDC) report in 2022, approximately 257 million people worldwide are living with chronic hepatitis B infection, representing a global prevalence of about 3.5% of the population [1,2]. In the Southeast Asia region, the number of individuals with chronic hepatitis B is estimated to reach 39.4 million (range 28.8–76.5 million). The disease contributes to approximately 410,000 deaths annually due to viral hepatitis infections, accounting for about 78% of deaths related to liver cancer and cirrhosis caused by hepatitis B and C viruses [3].

Indonesia ranks second among Southeast Asian countries in terms of the highest number of hepatitis B cases, with the prevalence of hepatitis B virus (HBV) infection ranging from 4.0% to 20.3% (Perhimpunan Peneliti Hati Indonesia, 2017; World Health Organization, 2024). According to the 2018 National Basic Health Research (Riskesdas), South Kalimantan Province reported 23,916 cases of hepatitis B, with the highest number recorded in Banjarmasin City, accounting for 4,011 cases [6]. HBV transmission primarily occurs through sexual contact and vertical transmission from infected pregnant women to their infants [7]. Although the prevalence of hepatitis B in Indonesia has declined from 7.1% in 2013 to 2.4% in 2023 (Ministry of Health of Indonesia, 2020), the number of infected individuals remains substantial. This is reflected by the identification of 50,789 pregnant women with reactive HBsAg results in 2023 [8].

Health-related quality of life (HRQoL) is an important aspect in monitoring chronic diseases such as hepatitis B, considering the prolonged disease course and the potential for complications including cirrhosis and hepatocellular carcinoma, as well as the significant psychosocial impact experienced by patients [9]. The European Quality of Life instrument (EQ-5D) is a generic, simple, and widely used tool for assessing quality of life. This instrument measures five health dimensions—mobility, self-care, usual activities, pain/discomfort, and anxiety/depression—through a questionnaire that employs graded levels of severity [10]

The EQ-5D-5L has been widely applied in clinical research and health economic evaluations because it enables the calculation of a utility index (UI) based on population value sets. However, to ensure the credibility of EQ-5D-5L when applied to patients with hepatitis B, psychometric evidence—including validity and reliability—needs to be established within the specific disease population.

For instance, a study conducted in Thailand involving 422 patients with chronic hepatitis B (CHB) across five disease stages (non-cirrhosis, compensated cirrhosis, decompensated cirrhosis, early/intermediate hepatocellular carcinoma, and advanced stage) utilized the EQ-5D-5L instrument. The results showed that health state utility (HSU) and EQ-VAS scores decreased significantly with disease progression, with a significant correlation observed between the two measures [11] These findings support the validity of the EQ-5D-5L in distinguishing clinical stages among patients with hepatitis B.

Several meta-analyses and systematic reviews have reported that generic instruments such as the EQ-5D-5L are widely used in studies involving patients with hepatitis B and have demonstrated acceptable reliability [12]. Furthermore, a systematic review of psychometric instruments used in hepatitis B research highlighted that the EQ-5D-5L is among the most frequently applied HRQoL instruments and has shown appropriate psychometric properties [13] In addition, a health utility study conducted in Japan among patients with hepatitis B and C using the EQ-5D-5L reported different utility values depending on the clinical status

of the disease, such as cirrhosis and hepatocellular carcinoma, indicating that this instrument is sensitive to variations in clinical conditions (Sugimori et al., 2022).

Despite the growing body of international evidence supporting the psychometric performance of the EQ-5D-5L in patients with hepatitis B, evidence regarding the validity and reliability of this instrument in the Indonesian population remains limited. Cultural differences, health perceptions, social values, and demographic characteristics may influence how respondents interpret and respond to items in quality-of-life questionnaires. Therefore, psychometric evaluation of the EQ-5D-5L instrument in a local population is essential to ensure its appropriateness for use in research and clinical practice in Indonesia.

Experimental Section

Study Design and Setting

This study employed an observational design with a cross-sectional approach and was conducted at several primary healthcare centers in Banjarmasin City.

Participants

Participants were female patients with confirmed hepatitis B infection (HBsAg positive) who were identified through an early detection program for hepatitis B at primary health centers. The sampling technique used was consecutive sampling, in which all patients who met the inclusion criteria during the data collection period (April–October 2025) were recruited sequentially until the required sample size was achieved.

The inclusion criteria were female patients with a positive HBsAg result who were willing to participate in the study. Patients with severe comorbidities, cognitive impairments that could interfere with questionnaire completion, or those who refused to participate were excluded from the study. Most participants were recruited through screening programs in primary healthcare settings. Based on the available medical record data, no diagnoses of decompensated cirrhosis or hepatocellular carcinoma were identified among participants at the time of data collection.

Instruments and Data Collection

Health-related quality of life (HRQoL) was measured using the Indonesian version of the EQ-5D-5L and the EQ visual analogue scale (EQ-VAS). Demographic data were collected using a structured questionnaire.

Statistical Analysis

The analyses included descriptive statistics, Spearman correlation analysis, nonparametric tests for known-groups validity, and the calculation of Cronbach's alpha to provide exploratory information on reliability. All statistical analyses were performed using SPSS version 26.0.

Although each dimension of the EQ-5D-5L consists of a single item, Cronbach's alpha was calculated to provide an initial indication of the overall internal consistency of the instrument. This approach has been used in several previous HRQoL validation studies as exploratory information regarding the global reliability of the scale [14].

Ethical Approval

This study was approved by the Research Ethics Committee of Universitas Muhammadiyah Purwokerto under registration number KEPK/UMP/293/III/2025.

Results and Discussion

Demographic Characteristics of Respondents

This study involved 42 female patients with hepatitis B who were identified through HBsAg screening as part of an early detection program conducted at primary health care centers in Banjarmasin City. Demographic characteristics of the respondents, along with the results of the EQ-5D-5L and EQ-VAS instruments, were analyzed in this study. The distribution of respondents' demographic characteristics is presented in Table 1.

Tabel 1. Demographic Characteristics of Hepatitis B Patients at Primary Health Centers in Banjarmasin.

Variable	(n=42)(%)
Age(Years)	
18-30 tahun	18 (42.9)
31-40 tahun	23 (54.7)
41-50 tahun	1 (2.4)
Employment Status	
Employed	17 (40.5)
Unemployed	25 (59.5)
Educational Level	
Primary school	3 (7.2)
Junior high school	4 (9.5)
Senior high school	15 (35.7)
Diploma/Bachelor's degree	20 (47.6)
Working in Healthcare Sector	
Yes	2 (4.8)
No	40 (95.2)
History of Medical Procedures Patients	
Yes	4 (9.5)
No	38 (90.5)
History of Contact with Hepatitis B Patients	
Yes	12 (28.6)
No	30 (71.4)
History of Blood Transfusion	
Yes	3 (7.1)
No	39 (92.9)

The results indicate that the majority of respondents were within the productive age group of 31–40 years (54.7%), followed by those aged 18–30 years (42.9%). Individuals in productive age groups generally experience greater social, occupational, and family responsibilities, which may increase psychological stress and potentially affect quality of life, particularly in the anxiety and depression domains assessed by the EQ-5D-5L instrument[9].

Regarding employment status, more than half of the respondents were unemployed (59.5%). Unemployment is often associated with reduced quality of life due to economic constraints and psychosocial burdens, especially among patients with chronic conditions such as hepatitis B [13]. However, within the scope of this study, employment status primarily served as a background characteristic and did not directly influence the psychometric evaluation of the instrument.

The educational background of respondents varied, with the largest proportion having completed a Diploma or Bachelor's degree (47.6%). Higher educational attainment is associated with better comprehension of questionnaire items and a greater ability to provide accurate and consistent responses. This finding is consistent with the study by Ispas et al. (2024), which reported that health literacy significantly influences respondents' understanding and the validity of responses to the EQ-5D-5L instrument [10].

Most respondents did not work in the healthcare sector (95.2%) and had no history of medical procedures (90.5%), indicating that the study population largely represented the general community with relatively low exposure to healthcare interventions. A history of contact with hepatitis B patients was reported by 28.6% of respondents, whereas a history of blood transfusion was identified in only 7.1%. These variations reflect the heterogeneity of respondents' risk backgrounds; however, they did not affect the psychometric performance of the EQ-5D-5L instrument evaluated in this study.

The demographic profile observed in this study is consistent with previous validation studies of health-related quality of life instruments conducted in primary health care settings. Sari et al. (2015) reported that individuals of productive age with moderate to high educational levels were capable of adequately understanding and completing the Indonesian version of the EQ-5D-5L questionnaire [15]. Therefore, the demographic composition of this study supports the appropriateness of the respondents for providing valid data in reliability and validity testing.

Overall, the demographic characteristics indicate that the respondents represent women of productive age who are commonly involved in hepatitis B screening programs through maternal and child health services at the primary care level. This further supports the relevance of using the EQ-5D-5L as a health-related quality of life measurement instrument among hepatitis B patients in primary health care settings.

Reliability Analysis of the EQ-5D-5L Instrument

Reliability testing in this study was conducted using the Cronbach's alpha coefficient to assess whether the instrument used was reliable. An instrument is considered reliable if the Cronbach's alpha value is ≥ 0.70. This criterion is consistent with commonly used reliability standards in research instruments. According to the reliability index classification proposed by Suharsimi (1998), reliability levels can be categorized as follows: 0.8–1.0 (very high), 0.6–0.8 (high), 0.4–0.6 (moderate), 0.2–0.4 (low), and 0–0.2 (very low) [16] The results of the reliability analysis for the EQ-5D-5L questionnaire are presented in **Table 2**.

Table 2. Reliability Test Results of the EQ-5D-5L Instrument

Reliability Statistics	
Cronbach's Alpha	N of Items
0.799	5

The results of the reliability test for the EQ-5D-5L questionnaire in this study indicated that the instrument demonstrated good internal consistency, with a Cronbach's alpha value of 0.799. This value exceeds the recommended minimum threshold ($\alpha \geq 0.70$), indicating that the instrument has an adequate level of reliability for measuring the quality of life of respondents in this study.

All domains of the EQ-5D-5L demonstrated Cronbach's alpha values above 0.7, indicating good internal consistency. This value is consistent with modern standards in the evaluation of reliability for health measurement instruments, where a Cronbach's alpha value of ≥ 0.70 is generally recommended as the minimum threshold for acceptable internal consistency [14].

The findings of this study are consistent with the results of a meta-analysis conducted by Fu et al. (2025), which reported that the EQ-5D-5L demonstrates strong reliability among patients with hepatitis B and other chronic liver diseases across different countries. Similar reliability patterns were also reported in a study by Sugimori et al. (2022), which assessed the EQ-5D-5L utility index among patients with hepatitis B and C in Japan and found that all domains of the instrument were able to measure health conditions consistently across different stages of the disease [13,17].

Furthermore, a systematic review by Ispas et al. (2024) confirmed that the EQ-5D-5L is one of the HRQoL instruments with the most reliable psychometric performance for chronic diseases, including hepatitis. The similarity between the findings of international studies and the results of this study suggests that the reliability of the EQ-5D-5L in the Indonesian population, particularly in Banjarmasin City, is consistent with global scientific evidence [10].

The Cronbach's alpha value of 0.799 obtained in this study indicates a good level of internal consistency. Although the EQ-5D-5L is not a classical multi-item instrument like many other quality-of-life questionnaires, this result suggests that the five dimensions measured are sufficiently related in representing the overall health status of the respondents. This finding is consistent with previous studies demonstrating that the EQ-5D-5L can provide adequate reliability across various populations of patients with chronic diseases.

Validity Analysis of the EQ-5D-5L Instrument

Validity testing was conducted to ensure that each domain of the EQ-5D-5L instrument adequately measures the intended aspects of health-related quality of life. Construct validity in this study was assessed using item-total correlation analysis. A domain was considered valid if the calculated correlation coefficient (r value) exceeded the critical value of r table (0.304), based on the sample size of this study. The results of the validity analysis are presented in **Table 3**.

The validity analysis demonstrated that all EQ-5D-5L domains had r values exceeding the critical r table value of 0.304, indicating that all domains were valid. The mobility domain showed a moderate item–total correlation (r = 0.571), while the self-care domain had an r value of 0.307, which, although close to the minimum threshold, still met the validity criterion. The usual activities domain exhibited a correlation coefficient of 0.520, reflecting a substantial association with the overall EQ-5D-5L score.

Table 3. Validity Test Results of the EQ-5D-5L Instrument

Domain	Item–total correlation (r)	Cut-off Value	Interpretation
Mobility	0.571	0.304	Valid
Self-care	0.307	0.304	Valid
Usual activities	0.520	0.304	Valid
Pain/discomfort	0.783	0.304	Valid
Anxiety/depression	0.879	0.304	Valid

The validity test results indicated that all domains were valid, with item–total correlation values exceeding the r-table threshold (0.304). The anxiety/depression domain showed the highest correlation value (0.879), suggesting that psychological aspects play a prominent role among female respondents of productive age, which is consistent with findings from previous studies [9]

The validity of the EQ-5D-5L in this population may also be supported by the educational background of the respondents, which was predominantly at the secondary to higher education level. A higher level of education may facilitate better understanding of the five-level response scale used in the EQ-5D-5L instrument.

Furthermore, the findings of this study are consistent with previous research by Sugimori et al. (2022) and Su et al. (2022), which reported that the EQ-5D-5L is sensitive in distinguishing variations in clinical conditions among patients with hepatitis B, particularly in the domains of mobility, usual activities, and psychological well-being (Su et al., 2022; Sugimori et al., 2022).

Correlation Analysis

Correlation analysis in this study was performed using Spearman's correlation test because the EQ-VAS and EQ-5D-5L utility index data were not normally distributed (p-value < 0.05). The strength of the relationship between variables was determined based on the correlation coefficient. The interpretation of the correlation strength between variables is presented in **Table 4**.

Table 4. Strength of Correlation Between EQ-VAS and EQ-Index Variables[18]

Correlation Value	Interpretation
0.00 - < 0.30	Very weak
≥ 0.30 - < 0.50	Weak
≥ 0.50 - < 0.70	Moderate
≥ 0.70 - < 0.90	Strong
≥ 0.90 - 1.00	Very strong

Based on the correlation analysis, a moderate correlation was observed between the EQ-VAS score and the EQ-5D-5L utility index (r = 0.669; p < 0.001). The results of the correlation analysis are presented in **Table 5**.

Table 5. Correlation Analysis Results Between EQ-VAS and EQ-Index

Metric	EQ-VAS	EQ-index
Spearman's correlation coefficient	0.669	0.669
p-value	< 0.001	< 0.001

Based on the scatter plot analysis, a moderate correlation was observed between the EQ-VAS and EQ-index variables, as indicated by the upward linear regression trend. However, the data points show a relatively wide dispersion (**Figure 1**).

The correlation analysis revealed a significant relationship between the EQ-VAS score and the EQ-5D-5L utility index score, with a moderate correlation value (r = 0.669; p < 0.001). This relationship indicates that patients' subjective perceptions of their health condition, as measured by the EQ-VAS, are consistent with the health utility values calculated based on the five dimensions of the EQ-5D-5L.

The correlation between these two measures is often used as an indicator of construct validity in quality-of-life research. Several previous studies have also reported a significant association between EQ-VAS and

EQ-index among patients with chronic diseases, suggesting that these two measures complement each other in describing patients' health status [11].
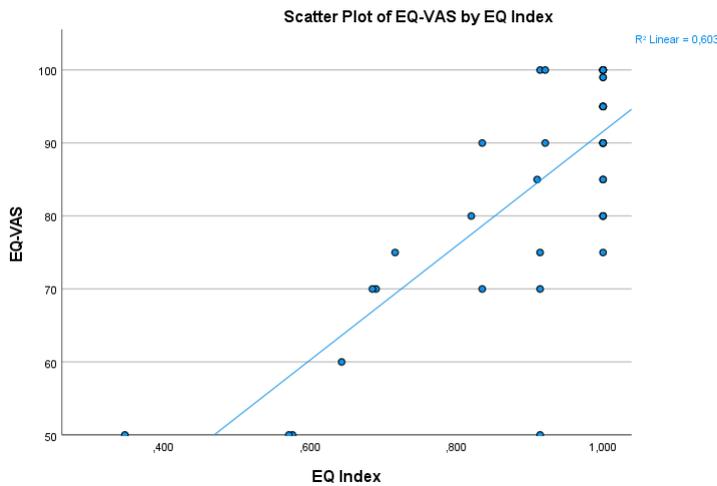

Figure 1. Scatter Plot with Linear Regression

Known-Groups Validity Test

The known-groups validity test was conducted to determine whether the EQ-5D-5L questionnaire is able to differentiate patients' quality of life across different groups. This analysis helps assess the validity of the questionnaire items by examining the significance values obtained from the known-groups validity analysis. The results of the known-groups validity test are presented in **Table 6**.

Variabel	N	KB±SD	PD±SD	KBD±SD	RN/RTN±SD	RC/D±SD
Age						
18-30 years	18	1.17 ± 0.514	1.17 ± 0.514	1.00 ± 0.000	1.39 ± 0.502	1.33 ± 0.485
31-40 years	23	1.17 ± 0.491	1.13 ± 0.458	1.22 ± 0.518	1.26 ± 0.541	1.26 ± 0.619
41-50 years	1	1.00	1.00	1.00	1.00	1.00
p-value		0.009*	0.918	0.169	0.208	0.195
Occupation						
Employed	17	1.18 ± 0.529	1.24 ± 0.664	1.12 ± 0.485	1.24 ± 0.437	1.24 ± 0.437
Unemployed	25	1.20 ± 0.500	1.08 ± 0.277	1.12 ± 0.332	1.40 ± 0.577	1.36 ± 0.638
p-value		0.736	0.615	0.563	0.364	0.652
Education Level						
Primary school	3	1.00 ± 0.000	1.00 ± 0.000	1.00 ± 0.000	1.67 ± 0.577	1.33 ± 0.577
Junior high school	4	1.25 ± 0.500	1.00 ± 0.000	1.00 ± 0.000	1.50 ± 0.577	1.25 ± 0.500
Senior high school	15	1.33 ± 0.617	1.20 ± 0.561	1.13 ± 0.352	1.40 ± 0.632	1.33 ± 0.617
Diploma/Bachelor's degree	20	1.10 ± 0.447	1.15 ± 0.489	1.15 ± 0.489	1.20 ± 0.410	1.30 ± 0.571
p-value		0.292	0.809	0.817	0.330	0.995
Working in a Medical Environment						
Yes	2	1.00 ± 0.000	1.00 ± 0.000	1.00 ± 0.000	1.00 ± 0.000	1.00 ± 0.000
No	40	1.20 ± 0.516	1.15 ± 0.483	1.13 ± 0.404	1.35 ± 0.533	1.33 ± 0.572
p-value		0.560	0.643	0.643	0.340	0.397
History of Medical Procedures						
Yes	4	1.00 ± 0.000	1.00 ± 0.000	1.00 ± 0.000	1.25 ± 0.500	1.00 ± 0.000
No	38	1.21 ± 0.528	1.16 ± 0.495	1.13 ± 0.414	1.34 ± 0.534	1.34 ± 0.582
p-value		0.398	0.501	0.501	0.770	0.219
History of Contact with Hepatitis B Patients						
Yes	12	1.17 ± 0.389	1.17 ± 0.577	1.00 ± 0.000	1.25 ± 0.452	1.25 ± 0.452
No	30	1.20 ± 0.551	1.13 ± 0.434	1.17 ± 0.461	1.37 ± 0.556	1.33 ± 0.606
p-value		0.855	0.913	0.189	0.568	0.828
History of Blood Transfusion						
Yes	3	1.33 ± 0.577	1.67 ± 1.155	1.00 ± 0.000	1.33 ± 0.577	1.67 ± 0.577
No	39	1.18 ± 0.506	1.10 ± 0.384	1.13 ± 0.409	1.16 ± 0.530	1.28 ± 0.560
p-value		0.377	0.125	0.565	0.952	0.135

Note: p < 0.05 indicates statistical significance; M, mobility; SC, self-care; UA, usual activities; PD, pain/discomfort; AD, anxiety/depression.

To assess the discriminative ability of the Indonesian version of the EQ-5D questionnaire in distinguishing patients' quality of life across specific groups, a known-groups validity analysis was performed. This validity was evaluated based on the significance value (p-value) obtained from the statistical test. A p-value ≥ 0.05 indicates that there is no significant difference between the groups, whereas a p-value < 0.05 indicates a statistically significant difference between the groups being compared. The results of the analysis showed a significant difference between age groups in the mobility dimension (p < 0.05).

The results of the known-groups validity analysis showed a significant difference between age groups in the mobility dimension (p < 0.05). This finding indicates that the EQ-5D-5L instrument is able to distinguish differences in respondents' quality of life based on certain demographic characteristics, particularly age.

The differences in mobility between age groups may be explained by physical changes associated with the aging process, although most respondents in this study were still within the productive age range. The absence of significant differences in the other dimensions may be attributed to the relatively homogeneous characteristics of the respondents, particularly regarding their clinical condition, as most participants were still in the early stages of the disease without severe complications.

Overall, the findings of this study indicate that the Indonesian version of the EQ-5D-5L demonstrates adequate psychometric performance in assessing the quality of life of patients with hepatitis B in primary healthcare settings. These findings provide preliminary evidence supporting the use of the EQ-5D-5L instrument among patients with hepatitis B in Indonesia, particularly in the context of quality-of-life research and health evaluation. Furthermore, the results of this study may serve as a basis for future research evaluating the quality of life of patients with hepatitis B in larger populations and across a wider range of disease severity.

This study has several limitations. The relatively small number of respondents means that the findings should be considered preliminary and need to be confirmed in studies with larger sample sizes. All participants were female and originated from a single geographic area. In addition, respondents were recruited from primary healthcare facilities in Banjarmasin City, which likely represent relatively stable clinical conditions; therefore, variations in disease severity may not have been fully captured.

Furthermore, the psychometric analyses conducted in this study were limited to internal consistency testing and construct correlation analysis. Therefore, further studies with larger and more diverse samples are needed to provide a more comprehensive evaluation of the psychometric properties of the EQ-5D-5L instrument.

Conclusions

The Indonesian version of the EQ-5D-5L instrument has been demonstrated to be valid and reliable for measuring the quality of life of patients with hepatitis B in Banjarmasin. All domains met the established criteria for validity and reliability. Therefore, the EQ-5D-5L can be recommended as a standard instrument for both research purposes and healthcare services related to hepatitis B in Indonesia.

Conflict of Interest

The authors declare no conflict of interest.

Acknowledgment

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