

**FAKTOR-FAKTOR YANG MEMPENGARUHI  
KUALITAS HIDUP ANAK SINDROM NEFROTIK**  
**Arif Kurniadi, Kristia Hermawan, Mei Neni Sitaresmi**  
**Departemen Ilmu Kesehatan Anak**  
**Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan**  
**Universitas Gadjah mada**

**Intisari**

**Latar belakang:** Sindrom nefrotik (SN) adalah penyakit ginjal kronis yang umum terjadi pada anak-anak. Sebagian besar anak dengan SN merespons dengan baik terhadap terapi steroid awal. Namun, tingkat kekambuhan yang tinggi, mencapai hampir 60%, dapat meningkatkan risiko komplikasi dan efek samping yang serius dari pengobatan. Kondisi ini secara signifikan mempengaruhi kualitas hidup dan kesintasan.

**Tujuan:** Untuk mengetahui faktor-faktor yang mempengaruhi kualitas hidup anak SN menggunakan PedsQL™ 4.0 *Generic Core Scales*.

**Metode:** Dilakukan studi observasional analitik dengan desain *cross-sectional* pada anak SN usia 2-18 tahun di RSUP dr. Sardjito Yogyakarta dari 1 Agustus 2021 sampai dengan 1 Oktober 2021 yang memenuhi kriteria inklusi dan eksklusi sampai jumlah sampel terpenuhi. Analisa univariat untuk memberikan gambaran distribusi demografi. Uji ICC (*Inter-Class Correlation*) dan *Kappa* untuk menilai kesepahaman atau kesepakatan (*agreement*) serta konsistensi (*concistency*) pada kedua penilai (laporan orang tua dan anak). Analisis bivariat pada variabel kontinyu berdistribusi normal dinyatakan dengan nilai rata-rata (*mean*) dan standar deviasi (SD) dibandingkan menggunakan uji-t, sedangkan variabel yang tidak berdistribusi normal dinyatakan dengan *median* dan *range* dianalisis menggunakan uji Mann-Whitney. Untuk variabel kategori dibandingkan menggunakan uji *Chi-square* atau uji *Fisher's exact*. Uji multivariat menggunakan *multiple logistic regression* atau regresi berganda untuk mengetahui variabel yang memberikan faktor kontribusi paling banyak terhadap kualitas hidup anak SN.

**Hasil:** Dari 59 sampel penelitian rerata usia anak sindrom nefrotik adalah 9,2 tahun, sebagian besar 61% laki-laki dengan tingkat pendidikan SD sebanyak 37,3%. Sekitar 42,4% tingkat pendidikan orang tua SMA, mayoritas 67,8% pendapatan di bawah UMR. Usia awitan paling banyak rentang 4-13 tahun (61%) dengan median durasi sakit 2 tahun didominasi 64,4% anak SNRS. Sebanyak 40,7% anak SN mengalami gangguan kualitas hidup pada domain *physical health* berdasarkan laporan orang tua dan 57,6% domain *psychosocial*. Sedangkan 49,2% mengalami gangguan kualitas hidup domain *physical health* dan 54,2% pada domain *psychosocial* menurut laporan anak. Uji ICC (*Inter-Class Correlation*) diperoleh nilai 0,829 (*excellent*) serta konsistensi (*concistency*) nilai *Kappa* 0,697 (*substantial agreement*) pada kedua penilai (laporan orang tua dan anak). Berdasarkan karakteristik demografi didapatkan ada hubungan yang bermakna antara usia saat ini, pendidikan anak, pendapatan orang tua, serta respon steroid, respon klinis dan durasi sakit terhadap kualitas hidup anak SN. Sedangkan usia awitan dan pendidikan orang tua tidak ada hubungan yang signifikan secara statistik.



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**Faktor-Faktor Yang Mempengaruhi Kualitas Hidup Anak Sindrom Nefrotik**

Arif Kurniadi, dr. Mei Neni Sitaresmi, Ph. D., Sp. A (K); dr. Kristia Hermawan, M. Sc., Ph. D., Sp. A.

Universitas Gadjah Mada, 2023 | Diunduh dari <http://etd.repository.ugm.ac.id/>

**Kesimpulan:** Didapatkan hubungan yang bermakna antara usia saat ini, pendidikan anak, pendapatan orang tua, respon steroid, respon klinis dan durasi sakit terhadap kualitas hidup anak SN.

**Kata kunci:** Sindrom nefrotik, kualitas hidup.

## **Influencing Factors Quality of Life in Nephrotic Syndrome Children**

**Arif Kurniadi, Kristia Hermawan, Mei Neni Sitaresmi**

**Departement of Child Health**

**Faculty of Medicine Public Health and Nursing,**

**Universitas Gadjah Mada**

### **Abstract**

**Background:** Nephrotic syndrome (NS) is a common chronic kidney disease in children. Although most children initially respond well to steroid therapy, the high recurrence rate of nearly 60% poses a risk of complications and serious treatment side effects. These factors significantly impact the quality of life and survival of these children.

**Purpose:** To determine factors influencing the quality of life of children with Nephrotic Syndrome (NS) using the PedsQL™ 4.0 Generic Core Scales.

**Methods:** An analytic observational study was conducted with a cross-sectional design on NS children aged 2-18 years at Sardjito Hospital of Yogyakarta from 1 August 2021 to 1 October 2021 which meets the inclusion and exclusion criteria until the number of samples is met. The study performed univariate analysis to examine the distribution of various characteristics, such as current age, age of onset, gender, ethnicity, children's education, parental education, parental income, steroid response, clinical response, illness duration, and co-morbidities. To assess agreement and consistency between assessors (parents and children), the study utilized tests such as ICC (interclass correlation) and Kappa tests. Bivariate analysis was conducted to compare continuous variables with a normal distribution, expressed as mean and standard deviation, using the t-test. For non-normally distributed variables, median and range were used, and the Mann-Whitney test was employed. Categorical variables were compared using the chi-square test or Fisher's test. In the multivariate analysis, multiple logistic regression or multiple regression was used to identify the variables that contributed the most to the quality of life of NS children.

**Results:** From 59 study samples, the average age of children with NS was 9.2 years; most of them were 61% male with an elementary school education level of 37.3%. About 42.4% of their parents' education level was senior high school, the majority of whom were 67.8% whose income was below the regional minimum wage. The most common age of onset is 4–13 years (61%) with a median duration of illness of 2 years, which is dominated by 64.4% of RSNS children. As many as 40.7% of NS children experienced quality of life disturbances in the physical health domain based on parental reports and 57.6% in the psychosocial domain. Meanwhile, 49.2% experienced impaired quality of life in the physical health domain and 54.2% in the psychosocial domain, according to reports from children. The ICC (interclass correlation) test obtained a value of 0.829 (excellent) and a consistency (consistency) Kappa value of 0.697 (substantial agreement) for both assessors (reports of parents and children). Based on demographic characteristics, it was found that there was a significant relationship between current age, children's



education, parental income, steroid response, clinical response, duration of illness, and the quality of life of children with NS. While the age of onset and parents' education did not have a statistically significant relationship.

**Conclusion:** There is a significant relationship between current age, children's education, parental income, steroid response, clinical response and illness duration on the quality of life of NS children based on PedsQL™ 4.0 Generic Core Scales.

**Keywords:** Nephrotic syndrome, quality of life.