

POLITEKNIK KESEHATAN KEMENKES TANJUNGPUR
JURUSAN TEKNOLOGI LABORATORIUM MEDIS
PROGRAM STUDI SARJANA TERAPAN LABORATORIUM MEDIS
PROGRAM SARJANA TERAPAN

Skripsi, Juni 2025

SUWENTY YUNIAN SAPUTRI

**KORELASI STATUS KELAHIRAN, BERAT BADAN DAN USIA GESTASI
NEONATUS TERHADAP NILAI *THYROID STIMULATING HORMONE*
(TSH) NEONATUS**

xvi + 34 halaman, 4 tabel, 9 gambar, 12 lampiran

ABSTRAK

Hipotiroid kongenital adalah kelainan tiroid pada neonatus yang berisiko menyebabkan gangguan tumbuh kembang jika tidak terdeteksi dini. Penelitian ini bertujuan menganalisis perbedaan nilai TSH antara status kelahiran tunggal dan kembar, serta menganalisis korelasi berat badan lahir, dan usia gestasi dengan kadar *Thyroid Stimulating Hormone* (TSH) pada neonatus. Penelitian dilakukan secara deskriptif analitik dengan desain *cross sectional* pada 70 bayi baru lahir yang diskринing di UPTD Balai Laboratorium Kesehatan Provinsi Lampung pada Mei 2025. Analisis data menggunakan uji *Mann Whitney* dan uji korelasi *Spearman*. Hasil menunjukkan mayoritas bayi lahir tunggal (88,57%), memiliki berat badan cukup (62,86%), dan usia gestasi cukup bulan (68,57%). Sebanyak 98,57% neonatus memiliki kadar TSH normal ($< 20 \mu\text{U/mL}$). Terdapat perbedaan nilai TSH bayi tunggal dan kembar ($p = 0,018$) serta terdapat korelasi usia gestasi ($r = -0,3336$ $p = 0,005$) dengan nilai TSH. Namun, tidak ditemukan korelasi signifikan antara berat badan lahir dan nilai TSH ($p = 0,259$). Simpulan: status kelahiran dan usia gestasi berpengaruh terhadap nilai TSH pada neonatus, sementara berat badan lahir tidak menunjukkan hubungan yang bermakna.

Kata Kunci: Berat badan lahir, hipotiroid kongenital, status kelahiran, TSH neonatus, usia gestasi.

Daftar Bacaan: 37 (2002 – 2024)

**TANJUNGKARANG MINISTRY POLYTECHNIC
DEPARTEMENT OF MEDICAL LABORATORY TECHNOLOGY
MEDICAL LABORATORY TECHNOLOGY STUDY PROGRAM
APPLIED GRADUATED PROGRAM**

Undergraduate Thesis, June 2025

SUWENTY YUNIAN SAPUTRI

***Correlation of Birth Status, Weight and Gestational Age of Neonates on Neonatal
Thyroid Stimulating Hormone (TSH) Values***

xvi + 34 pages, 4 tables, 9 figures, 12 appendices

ABSTRACT

Congenital hypothyroidism is a thyroid disorder in neonates that is at risk of causing growth and development disorders if not detected early. This study aims to analyze the relationship between birth status, birth weight, and gestational age with Thyroid Stimulating Hormone (TSH) levels in neonates. The study was conducted descriptively analytically with a cross-sectional design on 70 newborns who were screened at the Lampung Provincial Health Laboratory Center UPTD in May 2025. Data analysis using the Mann Whitney test and Spearman correlation test. The results showed that the majority of singleton babies (88.57%), had sufficient birth weight (62.86%), and were at full term gestational age (68.57%). A total of 98.57% of neonates had normal TSH levels ($<20 \mu\text{U/mL}$). There is a difference in TSH values between single and twin babies ($p = 0.018$) and there is a correlation between gestational age ($r = -0.3336$ $p = 0.005$) and TSH values. However, no significant correlation was found between birth weight and TSH levels ($p=0.259$). Conclusion: birth status and gestational age affect TSH levels in neonates, while birth weight does not show a significant relationship.

Keywords: Birth weight, congenital hypothyroidism, birth status, neonatal TSH, gestational age.

Reading List: 37 (2002 – 2024)