2023 Annual Research Day Poster Sessions – April 19th, 2023

Session/Poster# Presenter

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Current Average Body Temperatures by Pediatric Age Groups

Background: Evidence shows the average adult human body temperature has decreased by 0.03Â°C per decade since the 19th Century. We seek in the pediatric population to determine the current normal body temperature by age group.
Methods: In this cross-sectional study, temperature measurements by age groupings were obtained via EpicÂ® chart review across eleven hospitals of New York City Health & Hospitals from January 2018-January 2023. Age groupings were defined by: Neonate (1-28 days), Infants (29 days-12 months), Toddlers (13 months-3 years), Children (4-10 years), and Adolescents (11-18 years). Inclusion criteria, clinic visits (<18 years) with a diagnosis of Well Child/Health Supervision Visit (ICD-10 Z00, Z76). Exclusion criteria: missing temperatures or routes of measurements and concurrent infectious diagnoses. Data were reported as percentages or medians with interquartile ranges (25%, 75%). Kruskal-Wallis test was used to compare groups with alpha set at 0.05, 2-tailed.
Results: Of 257,159 visits from 253,305 individual patients, infants (26.8%) made up the majority, followed by children (21.1%), adolescents (20.4%), toddlers (19.6%), and neonates (12.1%). Males were slightly more common than females (50.7% vs. 49.3%). Racially, most were Not Specified (47.6%), followed by African American (43.4%), Asian (4.9%), White (3.1%), and American Indian (0.95%). Neonates 98.6â„‰ (98.2â„‰, 99.0â„‰) were found to have significantly ($p<0.001$) higher temperatures than Infants 98.6â„‰ (98.1â„‰, 99.0â„‰), Toddlers 98.3â„‰ (97.9â„‰, 98.8â„‰), Children 98.2â„‰ (97.9â„‰, 98.6â„‰) and Adolescents 98.2â„‰ (97.9â„‰, 98.6â„‰).
Conclusions: None of the age groups had a clinically important difference in temperatures, while neonates had statistically higher temperatures than other age groups less than 18 years old.