**Phenotypes**: Morbidity and mortality of children with Down syndrome: Data from the Trisomy 21 Consortium.

**Objective**: The study aimed to assess the hospitalization rates and characteristics of children with Down syndrome (DS) aged <18 years, based on a survey conducted between April and October 2020. The survey was developed by the Trisomy 21 Consortium, with financial and dissemination support from Down Syndrome Affiliates in Action (DSAIA), DSRC, CoorDown España, and the EDSA, Royal College of Psychiatrists, and the Federation Brazilian of the Associations of the Individuals with Down Syndrome (Brazil) and the European Down Syndrome Association. The contribution of the European Down Syndrome Association. The study was funded by the National Institute of Child Health and Human Development (NICHD), NIH for the research society.

**Methods**: A cross-sectional survey was conducted in 224 countries, including 23 high-income countries, 22 middle-income countries, and 55 low-income countries. The data were collected through a web-based survey and analyzed using descriptive statistics.

**Results**: The hospitalization rates were highest in high-income countries, with 100% of children hospitalized in the USA, 80% in Spain, and 54% in the UK. In middle-income countries, the hospitalization rates were lower, with 71% in Brazil, 56% in India, and 40% in China. In low-income countries, the hospitalization rates were even lower, with 28% in Nigeria, 23% in India, and 16% in Brazil.

**Conclusion**: The study highlights the importance of public health measures to prevent and manage COVID-19 among children with DS, particularly in low- and middle-income countries. Further research is needed to understand the underlying reasons for the variability in hospitalization rates and to develop targeted interventions to improve outcomes for children with DS.