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CONCLUSIONS:

Contemporary data demonstrate disparity in the availability of essential and advanced human and material resources for the care of critically ill children in resource-limited settings.

AIMS & OBJECTIVES: To describe the infrastructure and resources for pediatric acute care delivery in resource-limited settings (RLS) worldwide.

METHODS: Survey items were developed through literature review and revised following piloting. The survey was disseminated in November 2019 via e-mail directories of pediatric intensive care societies and networks and via a link disseminated using social media. Respondents were asked to self-identify as working in RLS. Results were summarized using descriptive statistics; resource availability was compared across World Bank country income groups.

RESULTS: We received 331 responses (239 hospitals, 60 countries), predominantly in Latin America and Sub-Saharan Africa (n=161, 67.4%). Hospitals were in middle-income [166 (69.5%)], low-income [28 (11.7%)] and high-income [44 (18.4%)] countries. Across 174 pediatric or adult ICUs admitting children, there were statistically significant differences in the proportion of hospitals reporting consistent resource availability (‘often’ or ‘always’) among country income groups (p <0.05). Resources with limited availability in lower income countries included advanced ventilatory support, invasive and non-invasive monitoring, central access, renal support, advanced imaging, microbiology, biochemistry, blood products, antibiotics, parenteral nutrition and analgesic/sedative drugs. 80 ICUs (45.9%) were staffed 24/7 by a pediatric intensivist or anesthetist. The nurse-to-patient ratio was <1:4 in 95 ICUs (54.5%) and 1:4-1:6 in 42 ICUs (24.1%). There were fewer pediatric subspecialty services and training programs in lower income countries.

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