MULTIPLE WORK ENVIRONMENTS. USING THIS AS A REFERENCE, WE IDENTIFIED 7 COMMON DRIVERS OF BURNOUT THAT AFFECT THE RESILIENCE OF PHYSICIAN STAFF OVER TIME IN THE PEDIATRIC CRITICAL CARE UNIT (PICU) OF AN ACADEMIC HOSPITAL. FOLLOWING THE IDENTIFICATION OF THE TOP 3 DRIVERS OF APP BURNOUT, WE DEVELOPED STRATEGIES TO ADDRESS THESE DRIVERS. WE ARE CURRENTLY ASSESSING THE IMPACT OF THESE STRATEGIES VIA REPEAT SURVEY TWO YEARS LATER.

RESULTS: 19 APPS (95%) RESPONDED TO THE INITIAL SURVEY. THE TOP 3 DRIVERS OF BURNOUT WERE IDENTIFIED AND STRATEGIES TO ADDRESS THESE WERE DEVELOPED BY MANAGEMENT AND THE APP GROUP (FIGURE 1).

CONCLUSIONS: CREATING A NOVEL SURVEY TO IDENTIFY THE UNIQUE DRIVERS OF BURNOUT AMONG PICU APPS WAS ESSENTIAL TO UNDERSTANDING AND DEVELOPING STRATEGIES TO IMPROVE APP RESILIENCE AND JOB SATISFACTION AT OUR INSTITUTION. NEXT STEPS WILL BE EVALUATING THE EFFICACY OF OUR INTERVENTIONS (VIA REPEAT SURVEY) AS WELL AS ASSESSING IF THIS PILOT TEST SURVEY HAS EXTERNAL VALIDITY AND IS GENERALIZABLE TO PICU APPS AT OTHER INSTITUTIONS.

A. Cardenas Aguirre1, M. Hernandez Garcia2, I. Villanueva Diaz2, E. Ruiz Perez2, B. Lira De Leon1, J.M. Mijares Tobias1, A.O. Giles Gonzalez2, Y. Muñoz Brugal2, G. Escamilla Asiani2, A. Agulnik3

1Hospital Infantil Teleton de Oncologia, Critical Care Medicine, Queretaro, Mexico, 2Hospital Infantil Teleton de Oncologia, Pediatric Oncology And Stem Cell Transplant Clinic, Mexico City, Mexico, 3St. Jude’s Children’s Research Hospital, Global Pediatric Medicine, Memphis, United States of America

AIMS & OBJECTIVES: CHILDREN WITH CANCER ARE A HIGH RISK POPULATION FOR ADVERSE OUTCOMES DURING CRITICAL ILLNESS. IN THIS STUDY, WE AIM TO DESCRIBE OUTCOMES FOR CHILDREN WITH CANCER ADMITTED TO THE PEDIATRIC INTENSIVE CARE UNIT (PICU) AND IDENTIFY POTENTIAL RISK FACTORS FOR ADVERSE OUTCOMES.

OUTCOMES IN CRITICAL ILLNESS FOR CHILDREN WITH CANCER IN A DEDICATED PEDIATRIC CANCER CENTER IN A RESOURCE-LIMITED SETTING.

A. Cardenas Aguirre1, M. Hernandez Garcia2, I. Villanueva Diaz2, E. Ruiz Perez2, B. Lira De Leon1, J.M. Mijares Tobias1, A.O. Giles Gonzalez2, Y. Muñoz Brugal2, G. Escamilla Asiani2, A. Agulnik3

1Hospital Infantil Teleton de Oncologia, Critical Care Medicine, Queretaro, Mexico, 2Hospital Infantil Teleton de Oncologia, Pediatric Oncology And Stem Cell Transplant Clinic, Mexico City, Mexico, 3St. Jude’s Children’s Research Hospital, Global Pediatric Medicine, Memphis, United States of America

AIMS & OBJECTIVES: CHILDREN WITH CANCER ARE A HIGH RISK POPULATION FOR ADVERSE OUTCOMES DURING CRITICAL ILLNESS. IN THIS STUDY, WE AIM TO DESCRIBE OUTCOMES FOR CHILDREN WITH CANCER ADMITTED TO THE PEDIATRIC INTENSIVE CARE UNIT (PICU) AND IDENTIFY POTENTIAL RISK FACTORS FOR ADVERSE OUTCOMES.

OUTCOMES IN CRITICAL ILLNESS FOR CHILDREN WITH CANCER IN A DEDICATED PEDIATRIC CANCER CENTER IN A RESOURCE-LIMITED SETTING.
RESULTS: There were 469 patients admitted to the PICU; 6 did not have a cancer diagnosis and 1 was transferred to another hospital. Of the 462 remaining pediatric cancer PICU admissions, the PICU mortality was 5.6% (26 patients) and adverse outcome (PICU death or palliative discharge) rate was 7.5% (35 patients). Two patients remain in ICU at the time of analysis. Severity of illness was significantly higher in medical (n=285) vs Surgical (n=177) Patients (PIM2 9.79% vs 3.05% p<0.0001 CI -0.09 to -0.04) and there was a trend towards higher mortality in the same group. (7% vs 3.4%, p=0.144). Indications for admission were Sepsis (n=110), Respiratory Distress (n=100) and Neurological deterioration (n=74). 43.9% (n=203) required mechanical ventilation.

CONCLUSIONS: While children with cancer have a high risk of critical illness and mortality, high survival rates are achievable with appropriate critical care, even in resource-limited settings.

**PICUS ARE NOT SMALL ICUS**

B.J. Brotherton¹, I. Barasa², M. Steere³, L. Okeyo²

¹AIC Kijabe Hospital, Critical Care- Internal Medicine And Pediatrics, Kijabe, Kenya, ²Kijabe Hospital, Paediatrics, Kijabe, Kenya

AIMS & OBJECTIVES: Kijabe Hospital (KH) opened its standalone PICU in August 2017. Prior to this date, like many hospitals in resource limited settings, patients were admitted to a combined ICU with adult patients and adult-trained staff. This study aimed to assess whether a dedicated PICU, with pediatric-trained nurses and clinical officers, had an impact on patient outcome.

METHODS: During this retrospective study, charts were reviewed for all patients, aged 16 years or less, admitted to the KH ICUs during two distinct time periods: combined ICU January 2014 - July 2017, standalone PICU August 2017-December 2019. Age, gender, primary service, diagnostic category, and outcome were collected from the pediatric department database.

RESULTS: During the combined ICU period, there were 104 pediatric patients admitted with a median age of 18 months (IQR 6-48). Primary admitting service was surgical (56.7%). The most common non-surgical admission category was infectious (71%). The overall mortality rate was 49%. There were 142 admissions to the dedicated PICU during the study period with 62% being non-surgical. Among non-surgical admissions, infectious category was most common (43.2%).

Median age of admissions was 36 months (IQR 6-120), and overall mortality rate was 34.5%.

CONCLUSIONS: Since opening a standalone PICU, total admissions and non-surgical admissions have increased. Based on a previous study at KH, non-surgical admissions of infectious category have been shown to have a higher mortality rate in our PICU, yet overall mortality rate has declined. This suggests that a dedicated PICU with pediatric trained staff can improve care of critically ill children.

**AN ENVIRONMENTAL SCAN TO DETERMINE READINESS TO CARE FOR CRITICALLY ILL CHILDREN WITH SEPSIS CONDUCTED IN HOSPITALS IN UGANDA AND CAMEROON**

T. Kissoon¹, B. Hwang², S. Bbusinge³, A. Tagoola⁴, E. Suiyven⁵, A. Krepiakevich², J. Ansermino⁶, J. Travin⁷

¹BC Children’s Hospital, Children’s And Women’s Global Health, Vancouver, Canada, ²BC Children’s Hospital, Centre For International Child Health, Vancouver, Canada, ³Holy Innocents Children’s Hospital, Pediatrics, Mbarara, Uganda, ⁴Jinja Regional Referral Hospital, Pediatrics, Jinja, Uganda, ⁵Cameroon Association of Critical Care Nurses, Cameroon Association Of Critical Care Nurses, Bamenda, Cameroon, ⁶University of British Columbia, Department Of Anesthesiology, Pharmacology & Therapeutics, Vancouver, Canada

AIMS & OBJECTIVES: Mortality for children with sepsis visiting health care facilities in low and middle income countries is high. The objective of the study is to determine the adequacy of the sources to care for children with sepsis.

METHODS: A structured questionnaire, completed by external assessors, not affiliated with the hospital, in six hospitals (6 in Uganda and 4 in Cameroon), was conducted in 2019. The questionnaire was based on a systematic review of structured processes and personnel required for care delivery in low and middle income countries and included the WHO Environmental Scan of essential elements of care. Direct observation of the common diseases leading to critical illnesses such malaria, pneumonia and diarrheal diseases by trained observer. This study was conducted in the Emergency Department at all facilities. Hospitals are located in the eastern and southern regions of Uganda and the northwest region of Cameroon. Hospitals are either public or faith-based private not for profit. All provide services for the majority of critically ill children. All facilities provide services 24/7.

RESULTS: Table 1. Outlines the findings of the self-administered questionnaire.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Facility 1</th>
<th>Facility 2</th>
<th>Facility 3</th>
<th>Facility 4</th>
<th>Facility 5</th>
<th>Facility 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sepsis</td>
<td>58</td>
<td>26</td>
<td>26</td>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Fever</td>
<td>51</td>
<td>44</td>
<td>38</td>
<td>38</td>
<td>43</td>
<td>64</td>
</tr>
<tr>
<td>WBC</td>
<td>51</td>
<td>44</td>
<td>38</td>
<td>38</td>
<td>43</td>
<td>64</td>
</tr>
<tr>
<td>Malaria</td>
<td>58</td>
<td>56</td>
<td>53</td>
<td>53</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>23</td>
<td>44</td>
<td>38</td>
<td>63</td>
<td>36</td>
<td>63</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>73</td>
<td>60</td>
<td>70</td>
<td>86</td>
<td>86</td>
<td>119</td>
</tr>
<tr>
<td>Malaria</td>
<td>58</td>
<td>56</td>
<td>53</td>
<td>53</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>Death</td>
<td>75</td>
<td>80</td>
<td>75</td>
<td>63</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>Discharge</td>
<td>68</td>
<td>80</td>
<td>83</td>
<td>80</td>
<td>78</td>
<td>86</td>
</tr>
<tr>
<td>Mortality</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

www.pccmjournal.org

March 2021 • Volume 22 • Number 3 (Suppl)

Copyright © 2021 by the Society of Critical Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies. Unauthorized reproduction of this article is prohibited.