

Review Form 3

Journal Name:	Asian Journal of Pediatric Research
Manuscript Number:	Ms_AJPR_128303
Title of the Manuscript:	STUDY OF BLOOD LACTATE LEVELS AT ADMISSION AS A PREDICTOR OF MORTALITY AND MORBIDITY IN CRITICALLY ILL CHILDREN IN A TERTIARY CARE PEDIATRIC INTENSIVE CARE UNIT.
Type of the Article	ORIGINAL RESEARCH ARTICLE

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PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	<p>This research article on blood lactate levels in critically ill children has notable implications for the pediatric healthcare community. It emphasizes the importance of blood lactate as a strong predictor of in-hospital mortality, enabling healthcare providers to quickly assess and identify at-risk patients, leading to timely interventions. The study highlights the effective use of lactate measurements in shaping clinical decisions, encouraging more aggressive treatment for those with high levels.</p> <p>By establishing a link between elevated lactate levels and multi-organ dysfunction, the findings suggest a need for multidisciplinary approaches to enhance patient outcomes and optimize resource allocation in pediatric intensive care units (PICUs). Additionally, the research lays groundwork for future studies and the development of standardized clinical guidelines concerning lactate measurement in critical care settings.</p> <p>In summary, this article has significant implications for the pediatric healthcare community, providing insights that enhance prognostic capabilities, guide clinical decisions, foster research developments, and ultimately, improve patient care and outcomes in critically ill children. Integrating blood lactate monitoring into clinical practice represents a vital step toward advancing pediatric critical care.</p>	
Is the title of the article suitable? (If not please suggest an alternative title)	Found suitable.	

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<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>The abstract of the article "Study of Blood Lactate Levels at Admission as a Predictor of Mortality and Morbidity in Critically Ill Children" provides a comprehensive overview of the research. It begins by establishing the significance of the study, noting the elevated risk of multiple organ failure and the role of hyperlactatemia as a risk factor for morbidity and mortality in critically ill children.</p> <p>The methods section describes the study as a prospective observational analysis involving 202 children aged one month to 18 years, detailing the collection of arterial blood samples and the data gathered, which includes demographic and clinical information.</p> <p>In the results section, key findings are presented, indicating that blood lactate levels are associated with survival outcomes, with specific lactate levels identified for both survivors and non-survivors. The statistical analysis highlights the sensitivity and specificity of lactate levels as a predictive measure.</p> <p>The conclusion underscores the importance of high blood lactate levels as an independent predictor of in-hospital mortality, emphasizing the value of early identification for improving patient outcomes.</p> <p>Overall, the abstract is well-structured, effectively communicating the context, methodology, key findings, and implications of the study, facilitating understanding of its significance.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>The article hypothesizes that elevated blood lactate levels are associated with increased risk of organ dysfunction and mortality, which is a well-supported concept in critical care medicine. High lactate levels typically indicate increased anaerobic metabolism, often due to tissue hypoxia, and have been associated with worse outcomes in various critical illness scenarios.</p> <p>The study design is a prospective observational study involving a suitable sample size (202 children), which enhances the reliability of the findings. Collecting arterial blood samples upon admission is standard practice for monitoring lactate levels in critically ill patients. The statistical analysis using SPSS and a significance threshold ($P < 0.05$) aligns with common practices in medical research.</p> <p>The conclusion that high blood lactate levels at admission can help identify critically ill children at higher risk of mortality is a reasonable interpretation of the results. Noting that early identification facilitates timely intervention is an important aspect of improving patient outcomes in a pediatric intensive care setting.</p> <p>Overall, the article's methodology, results, and conclusions are coherent with the current understanding of lactate as a prognostic marker in critically ill patients.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>To be included-</p> <p>Lactate, a useful marker for disease mortality and severity but an unreliable marker of tissue hypoxia/hypoperfusion in critically ill patients.</p> <p>Kushimoto S, Akaishi S, Sato T, Nomura R, Fujita M, Kudo D, Kawazoe Y, Yoshida Y, Miyagawa N. Acute Med Surg. 2016 May 16;3(4):293-297. doi: 10.1002/ams2.207. eCollection 2016 Oct. PMID: 29123802</p>	
<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Okay.</p>	
<p><u>Optional/General</u> comments</p>		

PART 2:

	<p>Reviewer's comment</p>	<p>Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</p>
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

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