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Study of PRISM Score as Predictor of Mortality in Pediatric Intensive Care Unit (PICU) in a Tertiary Care Hospital, Tirupati

[1]V.S. Anjan Kumar, [2]V. Spandana, [3]K. Sivaramudu, [4]B. Padmini Priya and [5]V. Mangya Naik

[1,2,4]Department of Pediatrics, SV Medical College, DR YSRUHS, Tirupati, Andhra Pradesh, India

[3]Department of Pediatrics, ACSR Medical College, DR YSRUHS, Nellore, Andhra Pradesh, India

ABSTRACT

In Developing countries like India, >¾th of critically ill children are treated in moderately equipped and resources limited pediatric intensive care (PICUs) in the public sector. PRISM III (Pediatric Risk of Mortality III) is the scoring system used to categorize pediatric patients who are at risk of mortality. The severity of illness may be predicted by the degree of alteration in the PRISM score. The goal of this study was to apply, evaluate, and validate the PRISM III scoring system in predicting mortality outcomes in the PICU of Svrrggh Tirupati, India. This Prospective observational study was conducted on 100 children between 1 month to 12 years of age over a period of one year admitted to the Pediatric Intensive Care Unit, Tertiary care hospital after obtaining approval from the Institution Ethics Committee. All the details of study cases and 19 parameters of the PRISM III scoring system of cases were collected and analyzed. The PRISM III score evaluation and mortality details were analyzed. A total of 100 children were observed, among which the majority were males (61%) and 45% of the cases were in the age group of 6-12 years. Neurological disorder (24%) was the most common indication for PICU admission and mortality was high (80%) in cases with metabolic disorders. In the present study the mean prism score was 9.45 with a median of 5.5 and a standard deviation of 10.02. Mortality was high (40.9%) in cases with a PRISM Score between 30-39 and the outcome was death in 30%.87.5% and 100% of the cases with PRISM scores of 10-19, 20-29 and 30-39 respectively, and the difference was found to be statistically significant. Mortality increased with an increase in PRISM III score in all the age groups and also in both males and females and the differences were found to be statistically significant. In the present study, a significant statistical difference was seen with the outcome of death in cases with the presence/absence of shock, need for ventilation and GCS score $\leq$8 >8 with an odds ratio of 1.15, 8.16 and 21.71 respectively. In the present study the area under the curve was 0.986 and the 95% confidence interval was 0.968 to 1.000. The best cut-off was at 11.5 with a sensitivity of 95.5% and specificity of 91%. The prism score would be considered to be "good" at predicting mortality. The PRISM III score is used to determine the severity of an illness objectively and can be performed effectively as a tool for predicting death in Indian PICU. In order to build and validate a mortality prediction score for our country, larger research is required.

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Key Words
Mortality, predictor, pediatric intensive care unit, PRISM score

Corresponding Author
B. Padmini Priya,
Department of Pediatrics, SV Medical College, Tirupati. Andhra Pradesh. India 517507
banothbaby123@gmail.com

Author Designation
[1]Associate Professor
[2,3]Assistant Professor
[4]Resident

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INTRODUCTION

In developing countries like India, more than three-fourths of critically ill children are treated in moderately equipped and resource-limited pediatric intensive care (PICUs) in the public sector. Mortality pattern in PICUs also varies widely. The categorization of at-risk patients is important for their early prediction of mortality based on basic clinical and laboratory parameters. PRISM III (Pediatric Risk of Mortality III) is one such scoring system used to categorize pediatric patients who are at risk of mortality. It has both physiological and biochemical parameters. The severity of illness may be predicted by the degree of alteration in the PRISM score. Risk assessed after a period (24 hrs of admission) can be made accurate in predicting individual child mortality related to compromised organ systems and risk of mortality in specific PICUs. The optimal predictor model should be independent of time and location. Patient's mortality is influenced not just by the PICU's performance but also by a variety of other factors such as the population's demographic and clinical features, hospital management and structure, case mix and admission patterns. As a result, field testing of these scoring systems in settings other than the ones in which they were developed is required. The goal of this study was to apply, evaluate and validate the PRISM III scoring system in predicting mortality outcomes in the PICU of Svrrggh, Tirupati, India.

MATERIAL AND METHODS

This Prospective observational study was conducted on 100 children between 1 month to 12 1`years of age over a period of one year admitted in the Pediatric Intensive Care Unit, S.V.R.R.G. General Hospital after obtaining approval from the Institutional Ethics Committee. All children with PICU stay <24 hrs, with conditions requiring major surgical interventions (cardiovascular and neurosurgical), admitted in a state of continuous cardiopulmonary resuscitation and never achieved stable vital signs for at least 2 hrs after admission and those with major chromosomal anomalies were excluded from the study.

Before the collection of data, all subjects were briefed about the purpose of the study and written informed consent was obtained. A preceded proforma containing details of demographic profile, history, clinical examination, diagnosis, PICU outcome (survival/death), length of stay, ventilated or not and 19 parameters of the PRISM III scoring system was prepared and filed for all study subjects. The PRISM III score evaluation is done as per the recommendation of Pollock *et al*.[1] within 24 hrs of admission to the ICU. Clinical assessments are done continuously for 24 hrs and the most abnormal value was considered for scoring. The patient's follow-up during the PICU stay and outcome were recorded as "survived" or "died" at the end.

Non-invasive blood pressure was recorded using a blood pressure monitor and oxygen saturation was measured with a pulse oximeter (PHILIPS MONITOR) at admission. Arterial blood gas analysis was done by radial artery prick using a Heparinized syringe under aseptic precaution and the sample was analyzed by Abbott ABG analyzer and noted. Institutional reference laboratory techniques were used to measure blood levels of total bilirubin, potassium, calcium, glucose, prothrombin time and Partial thromboplastin time were measured and noted. The most abnormal values were considered for scoring. The clinical assessment of heart rate, respiratory rate, pupillary reactions, and Glasgow coma scale score were made by a pediatric resident doctor. All data were entered, and the score was calculated. All sick children were followed up till the outcome (survived/mortality). Studied patients were classified into 4 groups according to their PRISM III score 0-9, 10-19, 20-29 and 30-39.

Mortality was analyzed regarding PRISM score, age, gender, diagnosis, and system/organ involved. Initial triaging emergency management and evaluation were done as per standard PICU protocols. All children were classified based on severity the system involved, and organ dysfunction and managed accordingly. PRISM III Score.

Statistical analysis: The study was analyzed by using SPSS version 20 and MS excel software and also epi info 7 version software. The expected mortality is calculated by using the formula:

- $p = e^r/1 + e^r$
- p = probability of PICU mortality
- r (risk of death) = a*PRISM III score + b*Age (in months) + c*operative status + d

Where a, b and c are logistic regression coefficients for the PRISM III score, age, and operative status (post-operative = 1, non-operative = 0) and d is constant. Where, e is a constant value and r stands for the empirical function of PRISM III scores, which is calculated by a non-linear method of curve-fitting using the observed results. The association between the study variables with the PICU mortality was tested using contingency/Pearson chi-square/Fischer's exact test, as appropriate. Multiple logistic regression models were constructed to assess the influence of PRISM III score and age on mortality. Further, the predictive accuracy of the model was assessed using the receiver operating curve analysis and expected mortality compared with observed mortality by Hosmer Lemeshow test.

RESULTS

In the present study, the majority i.e., 61% of the cases were males and 39% of the cases were females. 45% of the cases were in the age group of 6-12 years, followed by 29% in the age group of 1 month to 1 year and 26% of the cases were in the age group of 2-5 years.

In the present study, the neurological disorder was the most indication for PICU admission involved in 24% of the cases and the respiratory system was involved in 22% of the cases followed by sepsis which constitutes 17%. Among neurological disorders, Meningitis was the common neurological disease accounting for 40%, followed by AES and seizure disorder/status Epilepticus was the common neurological disease in 24-24% of the neurological cases, Cerebellitis, 4%, encephalopathy 4%, hydrocephalus 4% and Tuberculoma 4% of neurological cases respectively. Mortality was high (40%) in children with meningitis (Table 1,2).

In the present study, pneumonia was the most common respiratory illness in 68.1%, bronchiolitis in 9%, empyema in 9% and asthma, croup and pulmonary TB in 4.5-4.5% and 4.5% of the cases respectively. Mortality was seen in 20% of cases with pneumonia. Among the cases with cardiovascular diseases, dilated cardiomyopathy, myocarditis and hypertensive cardiomyopathy were seen in 33.3%, 33.3% and 33.3% of the cases, and mortality was seen in cases with dilated cardiomyopathy. And among the cases with gastrointestinal diseases, 50% of the cases had acute gastroenteritis with severe dehydration, 25% of the cases had hepatic encephalopathy and 25% of the cases had fulminant viral hepatitis, and mortality was seen in cases with hepatic encephalopathy. Among the cases with renal system involvement, 42.8% of cases had nephrotic syndrome, 14.2% had Acute glomerulonephritis, 14.2% had Chronic kidney disease and 28.5% of cases had neuroblastoma. 50% of the mortality was seen in cases with nephrotic syndrome and 50% of the mortality was seen in cases with Neuroblastoma (Table 1 and 2).

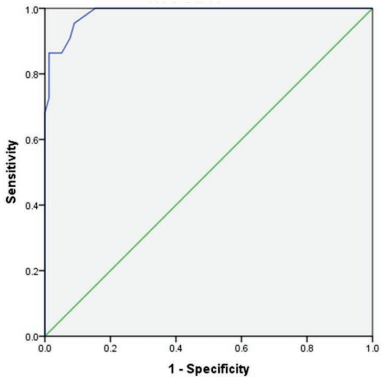

Fig. 1: Receiver Operating curve

In the present study, among the cases with hematological system involvement, 16.7% of cases were seen in each of cases with Autoimmune hemolytic anemia, Acute lymphoblastic leukemia, Fanconi's anemia, hemophilia, Immune thrombocytopenic purpura, sickle cell arthropathy. Among the cases with infections, Dengue was the most common infection seen in 47% of the cases with infections followed by Rickettsial fever in 29.4%, septicemia in 17.6% and cerebral malaria in 5.8% of the cases with infections. Among the cases with infections, 25% of the mortality was seen in cases with dengue and 66.7% was seen in cases with septicemia. In the present study, inborn errors of metabolism were the common cause seen in 35.7% of the other causes, followed by Diabetic ketoacidosis, Multisystem inflammatory syndrome in children (MISC) and snake bite seen in 15.8-15.8% and 10.8% of the other causes. Among the other causes, mortality was seen in 80% of the cases with Inborn errors of metabolism (IEM) and 50% of the cases with Infantile beriberi. Mortality was seen in 80% of the cases with metabolic involvement, followed by nutritional and renal 50-and 40% respectively, 33.3-25%, 23.5-21.7-25% and 16.7% of the cases with cardiovascular, gastrointestinal, sepsis, neurological, hematological and respiratory involvement respectively (Table 2).

In the present study, the mean duration of hospital stay in the cases who survived was 3.60 days with a standard deviation of 1.28 days. The mean duration of hospital stays in the cases who died was 2.95 days with a standard deviation of 1.21 days and the difference was found to be statistically significant. In the present study, 63% of the cases had a PRISM III Score between 0-9, 20% of the cases had between 10-19, 9%of the cases had between 30-39 and 9% of the cases had between 30-39 in the present study. The mean prism score was 9.45 with a median of 5.5 and a standard deviation of 10.02. The outcome was death in 30%.87.5% and 100% of the cases with prism scores 10-19, 20-29 and 30-39 respectively and the difference was found to be statistically significant (Table 3).

In the present study, mortality increased with an increase in PRISM III score in all the age groups and also in both males and females and the differences were found to be statistically significant (Table 3).

Receiver Operating Curve (ROC) In the present study, the area under the curve was 0.986 and the 95% confidence interval was 0.968-1.000. The best cut-off was at 11.5 with a sensitivity of 95.5% and specificity of 91%. (The best cut-off is at 10.5 with a sensitivity of 100% and specificity of 84.6 %.). The prism score would be considered to be "good" at predicting mortality. (Fig. 1). The area under the curve is 0.986. In the present study, the outcome was death in 34.5% and

Table 1: PRISM III score

Variable	Age restrictions and range		Score
	Infants	Children	
Systolic blood pressure in mm Hg	130-160	50-200	2
	55-65	50-75	6
	>160	>200	2
	40-54	50-64	6
	<40	<50	7
Diastolic blood pressure in mm Hg	>110	>110	6
Heart rate in beats per minute	>160	>150	4
	<90	<80	4
Respiratory rate in breaths per minute	61-90	51-70	1
	>90	>70	2
	Apnea	Apnea	5
Acidic Ph	>7.28		0
	>7.0-7.55		2
	<7.0		6
Alkaline pH	>7.48		0
	7.48-7.55		2
	>7.55		3
PaO_2 (mmHg)	>50	>50	0
	42.0-49.9	42.0-49.9	3
	<42	<42	6
PCO2 (mmHg)	<50	<50	0
	51-75	51-75	1
	>75	>75	3
PaO_2 requires arterial blood; PCO_2 can be measured from arterial, venous, or capillary specimens.			
Glasgow coma score	< 8	<8	6
Mental status should not be scored within 2 h of sedation, paralysis, or anesthesia. If sedation, paralysis, or anesthesia is continuous, score-based status before sedation, paralysis, or anesthesia.			
Variable	Age restrictions and Range	Score	
	Infants	Children	
Pupillary reactions	Unequal or dilated	Unequal or dilated	4
	Fixed and dilated	Fixed and dilated	10
The heart rate should not be monitored during crying or iatrogenic agitation, papillary size should not be assessed after iatrogenic dilatation.			
White blood cells	>3,000		0
	<3,000		4
Platelet count	>2 lakhs		0
	1 lakh-2 lakhs		2
	50,000-99,999		4
	< 50,000		5
PT and aPTT	Pt<22s and PTT<57s	PT<22s and PTT<57s	0
	PT>22s and PTT>57s	PT>22s and PTT>57s	3
Total bilirubin mg dL^{-1}	>3.5 (>1 month)		6
Potassium in mEq L^{-1}	3.0-3.5	3.0-3.5	1
	6.5-7.5	6.5-7.5	1
	<3.0	<3.0	5
	>7.5	>7.5	5
Calcium in mg dL^{-1}	7.0-8.0	7.0-8.0	2
	12.0-15.0	12.0-15.0	2
	<7.0	<7.0	6
	>15.0	>15.0	6
Creatinine (mg dL^{-1})	<0.9	<0.9	0
	>0.9	>0.9	2
BUN (mg dL^{-1})	<14.9		0
	>14.9		3
Glucose (mg dL^{-1})	40-60	40 -60	4
	250-400	250-400	4
	<40	<40	8
	>400	>400	8
Temperature (c}	<33		3
	33-40		0
	>40		3

Table 2:Distribution of cases by system involved

	Number(%)	Number(%)	Total
Neurological	19 (75)	6 (25)	25
Respiratory	19 (86.4)	3 (13.6)	22
Renal	3 (60)	2 (40)	5 (100%)
Sepsis	13 (76.5)	4 (23.5)	17 (100%)
Haematological	5 (83.3)	1 (16.7)	6 (100%)
Cardiovascular	2(66.7)	1 (33.3)	3 (100%)
Gastrointestinal	3 (75)	1 (25)	4 (100%)
Endocrine-DKA	3 (100)	0	3 (100)
Metabolic-IEM	1 (20)	4 (80)	5 (100%)
Nutritional-Infantile Beri Beri	1 (50)	1 (50)	2 (100)
Exposures	5 (100)	0	5 (100)
Inflammatory	4 (100)	0	4 (100)
Total	78	22	100 (100%)

16.9% of the cases with the age ≤1 year and >1 year respectively. No statistical difference was seen in the outcome of the disease with ages ≤1 year and >1 year and between males and females (Table 5). In the present study, a significant statistical difference was seen with the outcome in cases with the presence/absence of shock, need for ventilation, and GCS score ≤8 >8. Deaths were seen in more cases with shock, with the need for ventilation and GCS score of ≤8 with an odds ratio of 1.15, 8.16 and 21.71 respectively (Table 5). In the present study, among the cases which needed assisted ventilation, the mortality

Table 3:Distribution of cases by systemic diseases and mortality

	Outcome		
Systemic diseases	Survived Number (%)	Died Number (%)	Total N(%)
Neurological diseases	19	6	25
AES 5 (83.3)	1 (16.7)	6 (24)	
Cerebelltitis	1 (100)	0	1 (4)
Hydrocephalus	1 (100)	0	1 (4)
Meningitis	6 (60)	4(40)	10 (40)
Seizure disorder/status epilepticus	5 (83.3)	1(16.7)	6 (24)
Tuberculoma	1 (100)	0	1 (4)
Respiratory diseases			22
Asthma	1 (100)	0	1(4.5)
Bronchiolitis	2 (100)	0	
2 (9)			
Croup 1 (100)	0		
1 (4.5)			
Empyema	2 (100)	0	2 (9)
Pneumonia	12 (80)	3(20)	15 (68.1)
Pulmonary Tuberculosis	1 (100)	0	1 (4.5)
Total 19	3	22 (100)	
Cardiovascular system	3	1	4 (100)
Dilated Cardiomyopathy	0	1(100)	1 (33.3)
Myocarditis	1 (100)	0	1 (33.3)
Hypertensive Cardiomyopathy	1 (100)	0	1 (33.3)
GIT Diseases	3	1	4 (100)
Acute GE with severe Dehydration with Shock	2 (100)	0	2 (50)
Hepatic Encephalopathy	0	1(100)	1 (25)
Fulminant Viral hepatitis	1 (100)	0	1 (25)
Renal 5	2	7 (100)	
Acute Glomerulonephritis	1 (100)	0	1 (14.2)
Chronic Kidney Disease	1 (100)	0	
1 (14.2)			
Nephrotic Syndrome	2 (50)	1 (50)	3 (42.8)
Neuroblastoma	1 (50)	1 (50)	2 (28.5)
Hematological	5	1	6 (100)
Autoimmune hemolytic Anemia	1 (100)	0	1 (16.7)
Acute Lymphoblastic Leukemia	1(100)	0	1 (16.7)
Fanconi's anemia	0	1	1 (16.7)
Haemophilia	1(100)	0	1 (16.7)
Immune thrombocytopenic purpura with bleeding manifestations	1(100)	0	1 (16.7)
Sickle cell crisis	1(100)	0	1 (16.7)
Infections	13	4	17
Cerebral Malaria	1(100)	0	1 (5.8)
Dengue Fever	6 (75)	2 (25)	8 (47)
Rickettsial Fever	5 (100)	0	5 (29.4)
Septicemia	1 (33.3)	2 (66.7)	3 (17.6)
Exposures	5		5
OP Poisoning	1 (100)		1 (20)
Scorpion Sting	1 (100)		1 (20)
Snake bite	3 (100)		3 (60)
OTHERS	9	5	14
Endocrine – Diabetic Ketoacidosis	3 (100)	0	3 (21.4)
MIS C Inflammatory	4 (100)	0	4 (28.5)
Metabolic Disorders	1 (20)	4 (80)	5 (35.7)
Infantile Beri Beri	1 (50)	1 (50)	2 (14.3)

Table 4: Distribution of cases by mortality by gender and PRISM III Score

Variable	PRISM III Score				
Age	0-9 N(%)	10-19 N(%)	20-29 N(%)	30-39 N(%)	p-value
1 month-1year					
Total	15	6	5	3	Chi-square = 23.09. p = 0.000
Died	0	4(66.6)	5(100)	3(100)	
2- 5 years					
Total	18	5	1	2	Chi-square = 48.433. p = 0.000
Died	0	1(20)	1(100)	2(100)	
6-12 years					
Total	30	9	2	4	Chi-square = 32.981.p = 0.000
Died	0	1(11.1)	1(50)	4(100)	
Total	63(63)	20(20)	9(9)	9(9)	
Gender					
Male					
Total	42	9	6	4	Chi-square = 48.433. p = 0.000
Died	0	4(44.4)	6(100)	4(100)	
Female					
Total	21	11	2	5	Chi-square = 25.898. p = 0.000
Died	0	2(18.1)	1(50)	5(100)	
Outcome					
Total	63	20	8	9	Chi-square = 70.425, p = 0.000 S
Died	0	6(30)	7(87.5)	9(100)	

rate was 78.6% and there was no mortality among the cases which did not require assisted ventilation and the difference was found to be statistically significant. (Table 5). The results on the Goodness of the prediction model as seen by Hosmer and Lemeshow showed that the variation among the observed and predicted mortality across the PRISM III score strata was not significant.

DISCUSSIONS

In India, there hasn't been much coverage of the usage of scoring systems and intensive care audits.

Table 5: Distribution of cases by associated factors shock, ventilation and GCS score

	Outcome				
Age	Survived Number (%)	Died Number(%)	Odds ratio	Confidence interval	p-value
≤1 year	19 (65.5)	10 (34.5)	2.58	0.966 – 6.934	0.054
>1 year	59 (83.1)	12 (16.9)			
Sex					
Male	47 (77)	14 (23)	1.154	0.433 – 3.075	0.774
Female	31 (79.5)	8 (20.5)			
Shock					
Present	10 (45.5)	12 (54.5)	8.16	2.799-23.79	0.000
Absent	68 (87.1)	10 (12.8)			
Ventilation					
Required	6 (21.4)	22 (78.6)			0.000
Not required	72 (100)	0			
GCS Score					
≤8	2(20)	8 (80)	21.71	4.16-113.18	0.000
>8	76 (84.4)	14 (15.5)			

Only a few research have looked into the demands of pediatric critical care. The majority of scoring systems are developed in the west and must be tested in our own country. In the PICU, the death prognosis is always uncertain. Patient outcome prediction is crucial for patients and their families, as well as policy formation and resource allocation; optimizing the use of ICU beds, will certainly maximize the use of limited resources[2].

The mortality prediction model must be validated before it may be used in an environment that is significantly different from the one in which they were developed. The ideal probability model would be both institution and population-independent[3]. Our study was conducted with 100 children in the PICU of S.V.R.R.G.G.H Hospital, S.V. Medical College, Tirupati to test the validity of the PRISM III scoring method in our setting. As outcome variables, survival and death were recorded. The PRISM III score of 24 was used.

In the present study, 61% of the cases were males and 39% of the cases were females. Though respiratory disorders were the most common in most studies[4,5-8] in our analysis, the CNS group (24%) was the most common, followed by respiratory (22%), others sepsis (19%) and infection (17%). Our center discovered a mortality rate was 22%, which is low in comparison to Bhatia, *et al*.[8] study (24.7%), Ana Lilia, *et al*.[9] (24.7), and De Leon AL, *et al*.[10] (37.35%) and higher than other studies Pollock, *et al*.[1] (2.2-16.4), Bilan, *et al*.[4] (9.05), Varma, *et al*.[11] (14.8), Khilani, *et al*.[12] (6.7), Choi, *et al*.[13] (2.6).

In the present study, 78 (78%) children survived and 22 (22%) children died among the Survived 100%, 70% and 12.5% of the cases with prism scores 0-9, 10-19 and 20-29 respectively. The outcome was death in 30%.87.5% and 100% of the cases with prism scores 10-19, 20-29 and 30-39 respectively and the difference was found to be statistically significant. Our findings showed a rise in the PRISM score is related to an increase in mortality, with a statistically positive relationship with the outcome, which was consistent with Shah, *et al*.[14] research as the PRISM score grew, the percentage of deaths increased as well. When the score was between 6 and 10, there were 1.96% fatalities, 5.88% when the score was between 11 and 15, 14.81% when the score was between 16 and 20, 33.33% deaths when the score was between 21 and 25 and 70 percent mortality when the score was between 26 and 30. PRISM scores of greater than 30 expired in 87.51% of cases. When the PRISM III score was between 0 and 5, no deaths occurred.

In our research, a PRISM III score of ≥20 was linked to a very high death rate. Greater PRISM scores were similarly linked to higher mortality in Martha, *et al*.[15] studies showed a PRISM III score of ≥15 death rate high and El-Nawawy, *et al*.[16], study showed a PRISM score of 26 was the cut-off point for survival. Bellad et al.[17], study showed that with a PRISM score of 1-9 the proportion of deaths was 5.3%, rising to 100% with a score of 20-29.

Our study discovered that when the PRISM score rises, mortality also increased, as evidenced by numerous Indian, Asian, and other research[18-21]. Our study found more mortality in males as similar to Bora, *et al*.[22] whereas Costa, *et al*.[23] studies found no significant gender difference.

Because the mean PRISM III score is much lower in those who were discharged compared to those who died, it can be used to estimate the severity of the illness process. Mechanical ventilation and vasoactive medications were revealed to be death risk factors, correlating with the findings of Wasier, et al.[24] researchers who observed a greater mortality rate in patients having these interventions.

According to Shann, *et al*.[25] the model is ideal if the area under the ROC curve equals one. A range of 0.9-0.99% is very good, while 0.8 to 0.89% is good, while between 0.7 and 0.79% is acceptable. The model is bad if the area is less than 0.5. In the present study, the area under the curve is 0.986 and the 95% confidence interval is 0.968 to 1.000. The best cut-off is at 11.5 with a sensitivity of 95.5% and specificity of 91%. The prism score would be considered to be " good" at predicting mortality.

The area under the curve was reported to be 0.936% by Harilal Naik, *et al*.[26] and to be 0.947% by pollack[1] which is close to our findings. Slater, *et al*.[18] Multicenter studies 0.93 Khilani, *et al*.[12] 0.9 A variety of questions have been raised about the validity of a score obtained at the time of admission when the

length of stay is extended. However, even with a longer stay, our data revealed no statistically significant differences in PRISM III scores. This had no bearing on mortality predictions.

Limitations of the current study and the need for additional research. The PRISM III score has a limitation in that it requires numerous laboratory investigations. It cannot be used as a triage score since doing the whole set of tests required by the PRISM III score is extremely expensive. The current study only included a small number of participants. A multicentric trial will be needed to assess the validity of a score like the PRISM III. No individual patient decisions can be made solely based on PRISM III scores. PRISM III lacks a measure of morbidity or long-term disability following discharge. Even though the PRISM III score has a strong correlation with mortality, this information will have no impact on the use of PICU resources.

CONCLUSIONS

The PRISM III score is used to determine the severity of an illness objectively and can be performed effectively as a tool for predicting death in Indian PICUs. To build and validate a mortality prediction score for our country, larger research is required.

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