Correlation between the predicted range of weight from Pediatric Triage tape and the actual weight in Thai population

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Background

In mass casualty situation, Triage is the tool to select priority to treat casualty. Most triage system use vital signs to be the parameter. Because of a pulse rate, respiratory rate of pediatric casualty varied by age and the problem in identifying actual weight or age when pediatric casualty was left alone. In 1998, Pediatric Triage Tape was develop to be a triage tool (triage sieve, length base tape)for pediatric casualty in any age groups .This tool should be study for using in Thai population

Objective

The primary outcome was correlation between the predicted range of weight from Pediatric Triage tape and the actual weight

Methods

prospective study was performed. The actual weight was compare to the predicted range of weight from PTT in percentage of correct prediction. Correlation was demonstrated by Bland-Altman plot

Result

A total of 661 healthy children were included in this study.male 55.7%, female 44.3%.The study show that the percentage of correct prediction of range 50-80 cm ,80.01-100 ,100.01-140 were 89(95% CI 82.7 to 93.3) , 84.5(95% CI 74.3 to 88.7) , 56.6(95% CI 51.5 to 62.2) respectively. The correlation of mean different and the average of the midpoint of the range of weight from PPT in range of 50-80 cm were -3.239(mean), -7.836(lower limit of agreement), 1.358 (upper limit of agreement), in the range of 80.01-100 cm were 0.457(mean),-4.374(lower limit of agreement)5.288(upper limit of agreement), in the range of 100.01-140 cm were 0.289 ,-15.296(lower limit of agreement) ,15.296(upper limit of agreement)

Conclusions PTT is reliable and correlated to predict body weight of casualty of Thai people

Keywords Pediatric Triage Tape, Mass casualty, Triage sieve