Development of an assessment tool for the clinical significance of pharmacy interventions in pediatric in-patient setting
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Introduction
Pharmacists are always accountable for their clinical interventions in delivering pharmaceutical care. The significance and importance of clinical pharmacy service shall be assessed and evaluated in an effective way.

Objectives
To develop an effective tool that characterizes clinical significance of interventions and value of clinical pharmacy service in pediatric in-patient setting.

Methodology
Literature search was performed. A tool consisted with severity of error and value of service had been used in different clinical pharmacy services. Improvements and adjustments were made for the use of pediatric in-patient setting. The edited tool was reviewed and tested by two pediatric pharmacists and two clinical pharmacists of non-pediatric specialty through retrospective examination of 212 pharmacist clinical interventions in neonatal intensive care unit (NICU) setting. All rankings from the four clinical pharmacists were compared using the kappa statistics. Symmetry tests were applied to examine the consistency of ratings among pharmacists.

Result
Agreement between the raters was substantial for severity of error but not value of service. The weighted $\kappa$ statistics for the pairwise inter-rater agreement on severity of error is above 0.6, however, the agreement on value of service shows only small agreement (0.0-0.2) or only fair agreement (0.2-0.4). Non-pediatric pharmacists averagely rated higher than pediatric pharmacists. Chi-square test shows that severity of error and value of service are measuring different dimension of service. The developed tool was proven to be practical and reliable to rate severity of errors of clinical interventions in pediatric ward. However, another parameter, value of service, needs to be improved and tested in the future before incorporated into the instrument.