Improvement in medication safety amongst paediatric ward rounds - a systematicreview.

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IntroductionEvery year, medication errors harm children in hospitals. Ward rounds are a unique opportunity to bring information together and plan manage-ment. There is a need to understand what strategies can improve medication safety on ward rounds. A recent Health Safety Investigation Boardreport highlighted a need for medication reviews during ward rounds following a review of a weight-based medication error. We systematicallyreviewed published interventions to improve medication safety on ward rounds, for children and young people.MethodsSystematic review of all eligible studies including but not limited to cohort, time series, case control and quality improvement study designs.PubMed, Cochrane Register of Trials, and Web of Science were searched to June 2022 with no language restrictions. All studies that analysedinterventions implemented that altered how paediatric ward rounds were undertaken in relation to medicines. Patients must be children andyoung people aged between 0 and equal or less than 18 years old. Primary outcome was improvement in medication safety on paediatric wardrounds. This included reduction in prescribing error rates, healthcare-professionals’opinions on prescribing, improvement of documentation onward rounds and adverse events.ResultsThree studies were eligible for review. One examined the use of an acrostic, one the use of a checklist and the other a use of a specific prescribingward round involving a clinical pharmacist and doctor. None of the papers considered weight-based errors or demonstrated reductions in clinicalharm. Reductions in prescribing errors were noted by the different interventions, one noted a 37.7% decrease in technical errors with the use of achecklist. An acrostic highlighted an improvement from 26% to 76% in documentation relating to medications. A specialised ward round forreviewing medications noted a reduction from 1.66 to 1.19 in total errors per bed per day. Two studies highlighted a positive reaction from themedical team in improving ward rounds. All studies scored as high for risk of bias.ConclusionsThere are limited data on interventions to improve medication safety in paediatric ward rounds, with all published data being small scale, eitherquality improvement or audits, and locally derived/delivered. Good quality interventional or robust quality improvement studies are required to266ABSTRACTSBJPimprove medication safety on ward rounds. The review highlights an initial list of possible interventions that can be adapted and utilised to fit themodern paediatric ward round.ProtocolThe protocol can be found at PROSPERO (340201)