

Drug-related problems in the emergency department - important information or cumbersome time consumption

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Background Conducting medication reconciliation (MR) and review (MRe) is validated, yet time demanding methods for identifying drug-related problems (DRPs) and also addressing drug-related hospital admission (DRHA). In the fast-paced workflow of the emergency department (ED) physicians are, however forced to distribute their time to ensure that all admitted patients receive appropriate emergency care and DRHA is often unrecognized.

Purpose Investigate the incidence of DRPs identified by pharmacists during patients ED-stay and these DRPs? as sociation to DRHA.

Method Sub-study of a RCT; patients were included and randomized at arrival to the ED, Diakonhjemmet Hospital (DH), Oslo, Norway from April 2017 to May 2018. Average patient stay in the ED is 3.2 hours (2018). Only the intervention group was included in this sub-study. The intervention was MR and MRe conducted by a pharmacist immediately after admission to the ED. DRPs were identified, and results from both the MR and MRe were communicated to ED physicians. DRPs were investigated retrospectively by a multidisciplinary team (senior clinical pharmacists and senior physicians), classifying the DRPs either as clinically relevant to identify during the ED-stay, clinically relevant later during the hospital stay, not relevant during the hospital stay, or not a DRP. The team also classified admissions as probably DRHA, possibly DRHA or not a DRHA.

Findings Of 402 patients, 4.5% of patients were classified to having a probable, and 15.2% a possible DRHA. A total of 748 DRPs were identified during the ED stay, of which 600 were acknowledged by the multidisciplinary team as a DRP. Further, 33.5% of the DRPs were considered clinically relevant to identify during the short ED-stay, 61.3% was considered clinically relevant during the hospital stay and 5.3% was considered not relevant during the hospital stay. The 19.8% of the DRPs not considered to be a DRP was typically registered as a potential DRP. When evaluated in retrospective with additional information they were classified as not a DRP. In 85% of the patients classified to have a DRHA (both probably and possibly), the pharmacists in the ED identified one or more DRPs regarding the drugs involved in the DRHA.

Conclusion The incidence of clinically relevant DRPs in the ED is noteworthy. We found that a multidisciplinary team classified approximately one third of the identified DRPs as important to identify in the initial phase of the hospital admission. Our findings emphasize that pharmacists in the ED can play an essential role in addressing DRHA.