Medication Administration – Nursing Workload and Patient Safety in Clinical Wards

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In the setting of nursing practices, medication-related activities play a key role in achieving an effective therapeutic outcome for patients. In this context, the medication process has been pointed out as one of the prevailing activities at the work shifts of the nursing staff, having an impact on the workload of these professionals (Magalhães, Dall’Agnol, & Marck, 2013; Magalhães et al., 2015). Despite the advance of new technologies, drug administration remains a complex process related to higher incident rates that can cause adverse events to patients during their hospital stay. Forty per cent of the nursing time in clinical wards is estimated to be associated with drug administration (Armitage & Knapman, 2003), and work overload is a factor that contributes to the occurrence of errors in this process (Volpe, Pinho, Stival, & Karnikowski, 2014). Although this is a multidisciplinary process, the nursing staff has a greater share of responsibility and plays a key role in managing pharmacotherapy and ensuring patient safety. This study aims to analyze the characteristics of the work organization performed by nursing staff regarding medication administration procedures and their implications on the workload of these professionals and on patient safety. The study design is exploratory, descriptive and cross-sectional with mixed method research and an ecological restorative approach. According to this approach, participative photographic research methods adapted from the field of ecological restoration are employed (Magalhães et al., 2013; Gimenes, Marck, Atila, & Cassiani, 2015). The strategy of the mixed method adopted was that of the exploratory sequential design (QUAL → quan), in which qualitative data were collected in a first step and quantitative data were subsequently collected to complement and illustrate the initial findings (Creswell, 2010). Data were collected between January 2014 and March 2015, in three inpatient units of a teaching hospital in the south of Brazil, by means of photo walkabouts and focus groups, in the qualitative step. In the quantitative phase data were collected from the 162 lists of patients assigned to nursing technicians during their work shifts. The qualitative data, pooled in a category describing “medication administration as organized in the work shift of the nursing staff”, showed that the administration of medications has an impact on the professionals’ workload and patient safety. The quantitative data also demonstrated this impact, as they revealed a high number of drugs that nursing professionals have to prepare and administer during their work shift. There are weaknesses in the process that may contribute to medication administration errors, which are related to the number of doses and the number of patients assigned to each professional. The drug administration, workload and patient safety triad was found to be a cyclical relationship, in which the increased number of patients in the work schedules of nursing technicians increases the number of drugs to be administered and the chances for the occurrence of adverse events.

Keywords: Medication systems in the hospital; Workload; Patient safety; Nursing.
References


