



## ABSTRAK

**Latar Belakang:** *Medication error* merupakan salah satu masalah terapeutik yang sering terjadi di pelayanan kesehatan. Sejak *the Institute of Medicine* (IOM) pada tahun 1999 melaporkan bahwa setiap tahunnya sekitar 98.000 pasien di AS meninggal akibat *medical error*, muncul berbagai laporan baru terkait *medication error*. Angka kejadian *medication error* di Amerika 50 % terjadi pada proses *prescribing error* (10.1%) dan *drug administration error* (3,9%). Kejadian *medication error* di Rumah sakit pendidikan di London, dari 36.000 resep yang ditulis ditemukan 60% kesalahan karena penulisan resep dan 50% diantaranya dianggap kesalahan resep obat yang sangat serius. *American College of Clinical Pharmacy practice-based research network* (ACCP PBRN) menyebutkan bahwa kejadian *medication error* pada saat *prescribing* (53%), *administering* (13%), *monitoring* (13%), *dispensing* (10%), *documenting* (7%). Menurut data di Indonesia kesalahan dalam pemberian obat menduduki peringkat pertama (24.8%), namun belum ada data kejadian *medication error* di Instalasi farmasi Rumah sakit D dikarenakan belum dilakukan identifikasi risiko dan analisis risiko-risiko yang mungkin terjadi dengan pendekatan FMEA (*failure mode effects analysis*).

**Tujuan:** Menggunakan FMEA untuk mengidentifikasi potensi *medication error* dan mengembangkan strategi dalam menurunkan kejadian *medication error* di Instalasi farmasi di RS D.

**Metode:** Penelitian ini menggunakan penelitian tindakan (*action research*). Subjek penelitian ini adalah seluruh petugas farmasi di Instalasi farmasi Rumah sakit D.

**Hasil:** Pendekatan FMEA mampu menurunkan kejadian *medication error* secara signifikan ( $p= 0,011$ ). FMEA meningkatkan perbaikan lingkungan kerja berupa kerapihan ruangan kerja dan pengaturan suhu ruangan telah dilengkapi dengan monitoring suhu ruangan yang sesuai dengan SOP. Berdasarkan data tersebut dihasilkan bahwa FMEA dapat digunakan dalam mencegah *medication error*.

**Kesimpulan:** Pada Penelitian ini penerapan penggunaan FMEA dapat meminimalkan dan mencegah terjadinya *medication error* di Instalasi Farmasi, dan juga pendekatan FMEA sebagai standar keamanan pasien dalam mengidentifikasi masalah yang mungkin timbul, dan upaya pencegahannya dengan rencana tindak lanjut, implementasi dan desain ulang proses. Pada faktor layanan setelah partisipasi responden pada tindak lanjut FMEA telah dilakukan proses telaah obat pada setiap resep dan verifikasi saat pemberian obat dalam mencegah *medication error*.

**Kata Kunci:** *Medication error*, Instalasi Farmasi dan FMEA



## ABSTRACT

**Introduction:** Medication error is one of the therapeutic problems that often occurs in health services. Since the Institute of Medicine (IOM) reported in 1999 that around 98,000 patients in the US die from medical errors each year, new reports appear regarding medication errors. The incidence of medication error in the United States 50% occurs in the prescribing error (10.1%) and drug administration error (3.9%). The occurrence of medication errors at the teaching hospital in London, out of 36,000 prescriptions written found 60% of errors due to prescription writing and 50% of them were considered prescription errors that were very serious. The American College of Clinical Pharmacy practice-based research network (ACCP PBRN) states that the incidence of medication errors at prescribing (53%), administering (13%), monitoring (13%), dispensing (10%), documenting (7%). According to data in Indonesia, medication errors were ranked first (24.8%), but there were no data on the occurrence of medication errors in the D Pharmacy pharmacy because risk identification and risk analysis might not have been carried out with the FMEA approach (failure mode effects analysis).

**Objective:** Using FMEA to identify potential medication errors and develop strategies in reducing the incidence of medication errors in pharmaceutical installations in D. Hospital

**Methodology:** This study uses action research. The subjects of this study were all pharmacists at the D Hospital pharmacy installation.

**Results:** The FMEA approach was able to significantly reduce the incidence of medication errors ( $p = 0.011$ ). The FMEA approach enhances the improvement of the work environment in the form of tidiness of the workspace, setting the room temperature has been equipped with room temperature monitoring in accordance with the SOP and an increase in prescription review. Based on these data, FMEA can be used to prevent medication errors.

**Conclusion:** In this study the application of FMEA can minimize and prevent medication errors in Pharmacy Installation, and also the FMEA approach as a patient safety standard in identifying possible problems and prevention efforts with follow-up plans, process implementation and redesign. In the service factor after the respondent's participation in the follow-up to FMEA, a drug review process was carried out on each prescription and verification during the administration of the drug in preventing medication errors.

**Keywords:** *Medication error, Pharmacy Installation and FMEA*