INTISARI

Penggunaan sediaan injeksi yang diberikan melalui intravena merupakan suatu pilihan rute pengunaan obat yang mengharapkan efek kerja cepat. Pencampuran sediaan parenteral yang dilakukan di rumah sakit memungkinkan timbulnya beberapa masalah di antaranya kontaminasi bakteri dan partikel asing, serta inkompatibilitas fisikokimia larutan intavena. Tujuan dari penelitian ini adalah mengetahui persentase hasil rekonstitusi sediaan intravena *Single Dose Vial* (SDV), *Multi Dose Vial* (MDV) dan *IV admixture (Intravenous Admixture)* yang memenuhi persyaratan steril dan mengevaluasi proses pencampuran sediaan parenteral di bangsal perawatan RS PKU Muhammadiyah Kota Yogyakarta.

Penelitian ini merupakan jenis penelitian deskriptif observasional dengan rancangan *cross sectional*. Pengambilan data dilakukan secara prospektif terhadap hasil sediaan injeksi intravena pada Januari – Februari 2018 di bangsal Rumah Sakit PKU Muhammadiyah Kota Yogyakarta. Sampel penelitian adalah cairan sisa infus IV *admixture* dan sisa rekonstitusi SDV dan MDV. Metode uji sterilitas dilakukan di Laboratorium Mikrobiologi Penelitian Unit II Fakultas Farmasi UGM. Uji dengan cara inokulasi langsung sampel ke dalam media tioglikolat cair dan diinkubasi selama 14 hari pada suhu 37^0C. Metode observasi dilakukan untuk evaluasi proses pencampuran sediaan parenteral. Analisis data dilakukan dengan statistik deskriptif.

Dari 108 sampel yang terdiri dari 53 SDV, 4 MDV dan 51 IV *admixture* diperoleh sediaan yang memenuhi persyaratan steril sebesar 101 sediaan (93,52 %) dan yang tidak steril sebesar 7 sediaan (6,48%). Tujuh sampel yang tidak steril terdiri dari 4 (3,70%) sediaan SDV dan 3 (2,77%) sediaan IV *admixture*. Proses pencampuran sediaan parenteral di RS PKU Muhammadiyah Kota Yogyakarta masih memiliki beberapa kekurangan, yaitu penerapan teknik aseptik yang belum sepenuhnya sesuai SOP dan tempat pencampuran yang berada di bangsal perawatan memungkinkan terjadinya kontaminasi.

Kata kunci : sterilitas, IV admixture, SDV, MDV

ABSTRACT

The use of intravenously preparations is one of the routes in using drug that results in the fast-working effects. The parenteral preparations mixing that is done in hospitals might cause some problems such as bacteria and particles contamination, and physicochemical incompatibility. This study aimed to know the percentage of intravenous preparation reconstitution of Single Dose Vial (SDV), Multi Dose Vial (MDV) and IV admixture (Intravenous Admixture) which fulfilled sterile requirement, and evaluate the process of parenteral preparation mixing in PKU Muhammadiyah Yogyakarta.

This study is a descriptive observational research with cross sectional design. The data are collected prospectively on January - February 2018 at PKU Muhammadiyah Yogyakarta. The sample of the study was residual IV admixture infusion fluid and residual reconstitution of SDV and MDV. The sterility test method was conducted in Microbiology Laboratory of Research Unit II of Pharmacy Faculty UGM. The test was done by direct inoculation of the sample into liquid thioglycolic medium and then the sample was incubated for 14 days at 37^0C. Observational method was used to evaluate the process of parenteral preparations mixing. The data was analyzed by using descriptive statistics.

Among 108 samples consisting of 53 SDV, 4 MDV and 51 IV admixture, it was obtained that the preparation which fulfilled sterile requirements was 101 (93.52%) and non-sterile preparations was 7 (6.48%). Seven non-sterile samples consisted of 4 (3.70%) SDV preparations and 3 (2.77%) IV admixture preparations. The process of parenteral preparations mixing at PKU Muhammadiyah in Yogyakarta still had some weaknesses, such as the application of aseptic technique which has not fully complied with SOP and the mixing place located in the ward of treatment which might cause contamination.

Keywords : sterility, IV admixture, SDV, MDV