INTISARI

Pada akhir tahun 2019 ditemukan kasus pneumonia di Kota Wuhan Cina disebabkan oleh virus corona jenis baru, yaitu SARS-CoV-2. Kemudian penyakit tersebut disebut dengan Covid-19. Virus tersebut menyerang sistem pernafasan manusia dan menyebar secara cepat di berbagai negara, salah satunya Indonesia. Untuk meminimalkan penyebaran Covid-19 diterapkan kebijakan menjaga jarak (*social distancing*) dan melakukan penutupan beberapa fasilitas umum. Hal tersebut berdampak pada pembatasan aktivitas di beberapa fasilitas kesehatan, salah satunya aktivitas donor darah. Kebijakan tersebut berdampak pada ketersediaan darah di Unit Donor Darah (UDD), salah satunya adalah PMI Kota Yogyakarta. Pada penelitian ini dilakukan analisis risiko pada rantai pasok darah di PMI Kota Yogyakarta. Analisis risiko menggunakan metode FMEA, didapatkan bahwa RPN tertinggi. Potensi risiko pada RPN tertinggi tersebut kemudian dianalisis menggunakan *risk table* dan didapatkan kategori risiko yang memerlukan penanganan yaitu jumlah pendonor di Mobil Unit dan Dalam Gedung tidak sesuai dengan target, jumlah kegiatan donor darah Mobil Unit tidak sesuai dengan target dan jumlah pasokan darah yang diperoleh tidak mencapai target. Pada penelitian ini juga dilakukan simulasi untuk prediksi hasil skenario perbaikan. Dari hasil penelitian didapatkan untuk menanggulangi potensi risiko berupa penurunan jumlah pasokan darah yang berdampak pada ketidakmampuan PMI dalam pemenuhan permintaan darah maka dapat dilakukan dengan menambahkan frekuensi kegiatan donor darah di Mobil Unit sebesar 4 *event*/minggu, sehingga setidak-tidaknya terdapat 16 *event* /bulan dengan jumlah pendonor yang datang rata-rata 42 pendonor/*event.* Dengan 16 *event* mobil unit PMI mendapatkan pendonor sebesar 672 orang/bulan. Selain penambahan jumlah pasokan darah, PMI dapat menurunkan jumlah komponen darah yang rusak akibat kadaluarsa melalui sistem distribusi dan penawaran produk yang memiliki masa simpan pendek ke jejaring PMI Lain sebanyak 75 kantong/bulan. Dengan penambahan jumlah pendonor minimal 672 orang/bulan dan menurunkan jumlah komponen darah yang rusak karena kadaluarsa sebesar 75 kantong maka PMI dapat memenuhi kebutuhan total sebesar 87,4% dan mampu menurunkan *shortage* sebesar 33,2% dari model *existing*

Kata kunci : rantai pasok, darah, risiko, Pandemi Covid-19, *shortage*

ABSTRACT

At the end of 2019, a case of pneumonia was found in Wuhan City, China, caused by a new type of coronavirus, namely SARS-CoV-2. Then the disease is called Covid-19. The virus attacks the human respiratory system and spreads rapidly in various countries, one of which is Indonesia. To minimize the spread of Covid-19, a policy has been implemented social distancing and several public facilities have been closed. This has an impact on limiting activities in several health facilities, one of which is blood donation activities. This policy has an impact on the availability of blood in the Blood Donor Unit (UDD), one of which is PMI Yogyakarta. In this study, a risk analysis was carried out on the blood supply chain at PMI Yogyakarta City. Risk analysis using the FMEA method, it was found that the highest RPN. The potential risk at the highest RPN is then analyzed using a risk table and obtained risk categories that require treatment, namely the number of donors in the Mobile Unit and in the Building is not in accordance with the target, the number of blood donation activities in the Mobile Unit is not in accordance with the target and the amount of blood supply obtained does not reach the target. target. In this study, simulations were also carried out to predict the results of the improvement scenario. From the results of the study, it was found that to overcome the potential risk in the form of a decrease in the amount of blood supply which had an impact on the PMI's inability to fulfill blood demand, it can be done by adding the frequency of blood donation activities in the Unit Mobil by 4 events/ week, so that there are at least 16 events /month with the average number of donors who came was 42 donors/event. With 16 events, carthe PMI unit received 672 donors per month. In addition to increasing the amount of blood supply, PMI can reduce the number of damaged blood components due to expiration through a distribution system and product offerings that have a short shelf life to other PMI networks by 75 bags/month. By increasing the number of donors at least 672 people/month and reducing the number of damaged blood components due to expiration by 75 bags, PMI can meet the total need by 87.4% and reduce shortage by 33.2% from the model. existing

Key words: blood, risk, Covid-19 pandemic, shortage