

INTISARI

Rumah Sakit Akademik Universitas Gadjah Mada (RSA UGM) merupakan salah satu rumah sakit rujukan Covid-19 di Daerah Istimewa Yogyakarta. Selama pandemi, terjadi peningkatan jumlah limbah medis B3 dari penanganan Covid-19. Selain itu, limbah medis Covid-19 membutuhkan penanganan khusus untuk mencegah terjadi kontaminasi pada petugas, tenaga medis, maupun lingkungan. Oleh karena itu, penelitian ini meneliti proses pengelolaan limbah medis B3 Covid-19 pada RSA UGM melalui analisis penilaian risiko dengan menggunakan *failure mode and effect analysis*.

Proses analisis risiko terdiri dari: (1) menentukan ruang lingkup dan proses bisnis, (2) mengidentifikasi potensi risiko, dampak risiko, penyebab risiko, dan proses kontrol berdasarkan hasil wawancara dan Keputusan Menteri Republik Indonesia No. HK.01.07/MENKES/537/2020, (3) verifikasi hasil identifikasi risiko, (4) penilaian potensi risiko, (5) pembuatan diagram pareto dan matriks risiko, serta (6) perumusan *risk treatment*. Survei kuesioner ahli dilakukan pada personel yang terlibat dalam unit pembuangan limbah di rumah sakit untuk menilai *severity*, *occurrence*, dan *detection* risiko. Risiko diurutkan prioritasnya berdasarkan nilai *risk priority number* dan jenis risiko. Selanjutnya, rekomendasi *risk treatment* digunakan untuk mengelola risiko.

Berdasarkan hasil penelitian, terdapat 25 risiko dari mode kegagalan potensial yang teridentifikasi pada pengelolaan limbah medis B3 Covid-19 di RSA UGM. Jenis risiko yang tergolong *extreme risk* ada 9 risiko, *high risk* ada 14 risiko, dan 2 risiko tergolong *low risk*. Prioritas risiko untuk ditangani yaitu risiko jatuhnya limbah medis Covid-19 keluar dari kantong/kotak limbah, keterlambatan pengangkutan, kantong limbah khusus infeksius robek saat penimbangan, ada vektor serangga/hama lainnya di TPS, dan limbah medis tidak dimasukkan dalam *bin* TPS. Temuan tersebut dan rekomendasi *risk treatment* yang dirumuskan dapat menjadi referensi bagi rumah sakit dalam mengelola prioritas risiko pada pengelolaan limbah medis B3 Covid-19.

Kata kunci: analisis risiko, FMEA, pengelolaan limbah medis, diagram *fishbone*, Covid-19.

ABSTRACT

Rumah Sakit Akademik Universitas Gadjah Mada (RSA UGM) is one of Covid-19 referral hospitals in the Special Region of Yogyakarta. During the pandemic, there is significant escalation of medical waste from handling Covid-19. In addition, Covid-19 medical waste requires special handling to prevent contamination of personnel, medical personnel, and the environment. Thus, this study examines the process of managing Covid-19 medical waste at RSA UGM through risk assessment analysis using failure mode and effect analysis (FMEA).

The risk analysis process consists of: (1) determining the scope and business processes, (2) identifying potential risks, risk impacts, risk causes, and process control based on the results of interviews and Decree of the Minister of the Republic of Indonesia No. HK.01.07/MENKES/537/2020, (3) verification of the results of risk identification, (4) assessment of potential risks, (5) making pareto diagram and risk matrix, and (6) formulation of risk treatment. An expert questionnaire survey was conducted on personnel involved in the waste disposal unit in the hospital to assess severity, occurrence, and risk detection. Risks are prioritized based on the value of the risk priority number and type of risk. Furthermore, risk treatment recommendations are used to manage risk.

Based on the research results, there are 25 risks of potential failure modes identified in the management of Covid-19 medical waste at RSA UGM. There are 9 risks classified as extreme risk, 14 risks are classified as high risk, and 2 risks are classified as low risk. The priority risks to be handled are the risk of Covid-19 medical waste falling out of the waste bag/box, delays in transportation, the special infectious waste bag torn during weighing, other insect/pest vectors in the waste temporary storage, and medical waste not put in the temporary storage bin. Hospitals can refer to these findings and risk treatment recommendations for managing risk priorities in the Covid-19 medical waste management.

Keywords: *risk analysis, FMEA, medical waste management, fishbone diagram, Covid-19.*