Pengaruh penggunaan alat pelindung diri terhadap kesulitan intubasi pada pasien tersangka COVID-19 = The use of personal protective equipment and its effect on intubation difficulty in suspected COVID-19 patients

Noor Hafidz, author

Abstrak

Latar Belakang.: COVID-19 adalah penyakit yang disebabkan oleh virus SARS CoV 2. Jumlah penderita sampai saat ini 1,7 juta orang di seluruh dunia, dan semakin bertambah setiap harinya. Sebanyak 2,3% dari pasien COVID-19 memerlukan intubasi. Intubasi pada pasien COVID-19 memiliki risiko pajanan terhadap jalan napas pasien yang memiliki viral load yang tinggi. Anestesiologis yang melakukan prosedur intubasi harus memakai alat pelindung diri (APD) yang sesuai untuk mengurangi risiko penularan. Intubasi trakeal pada pasien tersangka COVID-19 dapat dianggap intubasi dengan penyulit karena pemakaian APD lengkap berpotensi menimbulkan hambatan. Penelitian ini bertujuan untuk mengetahui hubungan antara pemakaian APD lengkap dengan kesulitan intubasi pada pasien tersangka COVID-19.
Metode. Penelitian ini merupakan penelitian deskriptif analitik retrospektif menggunakan metode survei berbasis googleform. Sampel penelitian adalah peserta Program Pendidikan Dokter Spesialis – 1 Anestesiologi dan Terapi Intensif tahap magang dan mandiri. Survei dilakukan pada minggu pertama bulan Mei 2020. Hasil survei disajikan dalam bentuk tabel, dan analisa hubungan kemaknaan antar variabel dilakukan dengan uji Chi square serta uji Fisher.
Hasil. Sebanyak 65 responden berpartisipasi. Kesulitan intubasi dialami oleh 28 (43,1%) responden. 24 responden melaporkan kesulitan bergerak saat memakai APD seluruh tubuh, namun hanya 15 (23,1%) responden mengalami kesulitan intubasi (p = 0,016). 48 (73,8%) responden melaporkan kesulitan visualisasi saat memakai APD wajah, namun hanya 24 (36,9%) responden yang mengalami kesulitan intubasi (p = 0,058). 27 (41,5%) responden menyatakan face shield merupakan APD wajah dengan visualisasi terbaik, dan 47 (72,43%) responden menganggap kombinasi goggle dan face shield memberikan visualisasi terburuk. Penggunaan kacamata, satu jenis atau kombinasi APD wajah, penggunaan aerosol box atau plastic cover, dan durasi pemakaian APD tidak berhubungan dengan kesulitan intubasi. Faktor lain yang berhubungan dengan kesulitan intubasi adalah bila intubasi dilakukan pada keadaan emergensi. Sebagian besar responden setuju bahwa pemakaian APD saat melakukan intubasi akan membuat kesulitan melihat, kesulitan bergerak dan menimbulkan rasa panas yang menghambat pekerjaan.
Simpulan. Terdapat hubungan antara penggunaan APD dengan kesulitan intubasi pada pasien tersangka COVID-19.
.....Background. COVID-19 is a disease caused by the SARS CoV 2 virus. The number of patients to date is 1.7 million people worldwide and counting. As many as 2.3% of COVID-19 patients require intubation. Intubation in COVID-19 patients has a risk of exposure to the patient’s airway that has high viral load. Anesthesiologists who carry out intubation procedures must use appropriate personal protective equipment (PPE) to reduce the risk of transmission. Tracheal intubation in confirmed or suspected COVID-19 patients can be considered as difficult intubation. This is because the use of PPE can hindrance the intubation procedure itself. This study aims to determine the relationship between the use of PPE with difficulty in

intubating suspected COVID-19 patients.
Method. This research is a retrospective analytic descriptive study using the Googleform-based survey method. Respondents were senior and middle Anesthesiology and Intensive Therapy resident. The survey was conducted in the first week of May 2020. The results of the survey are presented in tabular form, and the analysis of the significance of the relationships between variables was carried out using the Chi square test and Fisher's exact test.
Result. A total of 65 respondents participated. Difficult intubation was experienced by 28 (43.1%) respondents. 24 respondents reported difficulty moving while wearing full body PPE and among those 15 (23.1%) respondents had difficulty intubating ($p = 0.016$). 48 (73.8%) respondents reported difficulty visualizing when using facial PPE, but only 24 (36.9%) respondents had difficulty intubating ($p = 0.058$). 27 (41.5%) respondents stated that face shield was the best facial PPE, and 47 (72.43%) respondents considered the combination of goggle and face shield to provide the worst visualization PPE. The use of glasses, one type or combination of facial PPE, the use of aerosol boxes or plastic covers, and the duration of wearing PPE are not related to intubation difficulties. Another factor related to intubation difficulties is when intubation is performed in an emergency situation. Most respondents agreed that the use of PPE during intubation would make it difficult to see, to move and cause a heat sensation that impedes work.
Conclusion. There is a relationship between the use of PPE and the difficulty of intubating suspected COVID-19 patients