RINGKASAN

FAKTOR RISIKO TERJADINYA PNEMONIA BERAT PADA BAYI DI KABUPATEN LOMBOK TIMUR

Keputusan pemerintah untuk menetapkan penanggulangan pnemonia sebagai titik berat kegiatan program P2 ISPA pada tahun 1990 merupakan pilihan yang tepat, khususnya bagi kabupaten Lombok Timur. Karena sampai saat ini proporsi kematian bayi lebih dari separuhnya disebabkan oleh pnemonia berat. Walaupun angka penemuan kasus tersebut pada tahun 2002 hanya 7,95% yang berarti di bawah angka perkiraan nasional (10% – 20%), tetapi kematian yang terjadi sudah memberi kontribusi sangat besar, yaitu 62,23% dari total kematian bayi 2002.

Tujuan penelitian ini adalah untuk mempelajari hubungan antara faktor lingkungan rumah, faktor pada bayi dan faktor sosial ekonomi dengan terjadinya pnemonia berat pada bayi.

Rancangan penelitian yang digunakan kasus kontrol,di mana kasus adalah bayi berumur 0 sampai 1 tahun, penduduk kabupaten Lombok Timur yang dirawat di Rumah Sakit Umum Selong selama periode Januari sampai dengan Juni 2003 dan didiagnosis pnemonia berat oleh dokter spesialis anak rumah sakit tersebut. Sedangkan kontrol adalah penderita batuk pilek biasa yang tinggal di sekitar rumah kasus. Jumlah sampel seluruhnya 104 terdiri dari 52 kasus dan 52 kontrol. Sebagai variabel tergantung adalah bayi dengan pnemonia berat, sedangkan variabel bebasnya merupakan faktor risiko yang termasuk dalam faktor lingkungan rumah (kepadatan hunian kamar tidur, ventilasi kamar, pencahayaan alamiah dalam kamar, pencemaran asap dapur, asap rokok, asap obat anti nyamuk, jenis lantai, jenis dinding, adanya sumber infeksi primer, keberadaan ternak dan kelembaban udara), faktor pada bayi (umur bayi, jenis kelamin, BBLR dan status imunisasi) serta faktor sosial ekonomi (umur kedua orang tua, pendidikan orang tua, penghasilan orang tua, keteraturan minum obat dan kebiasaan berobat ke pihak non medis). Cara pengumpulan data dilakukan melalui wawancara, observasi dan pengukuran dengan menggunakan kuesioner yang telah disusun oleh peneliti. Analisis dilakukan secara deskriptif untuk mempelajari distribusi frekwensi subjek dalam tiap variabel serta analisis statistik untuk membuktikan adanya hubungan antara variabel bebas dengan terjadinya variabel terikat. Analisis statistik menggunakan regresi logistik ganda pada tingkat kemaknaan $p < 0,05$ dengan interval keyakinan 95% serta rasio odds untuk menghitung besar risiko. *Software* yang digunakan adalah *SPSS 10,0 for windows*.

Hasil penelitian menunjukkan hanya ada satu variabel yang bermakna yaitu kepadatan hunian dalam kamar tidur dengan $p = 0,002$ dan OR = 4,588 berada pada kisaran 1,757 – 11,985. Artinya bayi yang tidur di kamar berpenghuni padat (lebih dari 3 orang dalam kamar berukuran < 8 m^2) mempunyai risiko 4 sampai 5 kali lipat untuk menderita pnemonia berat dibanding yang tidak berpenghuni padat. Variabel lain tidak merupakan faktor risiko terjadinya pnemonia berat pada bayi.

Sebagai kesimpulan, dengan ditemukannya kepadatan hunian kamar tidur sebagai faktor risiko yang berpengaruh terhadap kejadian pnemonia berat pada bayi di kabupaten Lombok Timur, maka disarankan kepada pihak-pihak terkait seperti Dinas Kesehatan, Dinas Sosial, Dinas Pekerjaan Umum dan sebagainya, dengan

dikoordinir oleh kepala dusun atau bahkan kepala desa untuk melakukan upaya-upaya ke arah terciptanya rumah sesuai dengan *standard* yang dianjurkan Departemen Kesehatan, khususnya menyangkut tingkat kepadatannya. Disamping itu juga harus dilakukan upaya promosi kesehatan terutama penyadaran masyarakat tentang pengertian rumah sehat, bahaya-bahaya akibat kondisi rumah yang tidak memenuhi syarat serta kebiasaan-kebiasaan dalam rumah tangga yang berisiko untuk menimbulkan penyakit akibat lingkungan.

SUMMARY

THE RISK FACTOR OF SEVERE PNEUMONIA AMONG INFANTS IN THE DISTRICT OF EAST LOMBOK

The decision of the government to establish pneumonia eradication as the core of P2 ISPA program activities in 1990 was an appropriate decision, particularly for the District of East Lombok. To date, more than a half of the proportion of infant mortality results from severe pneumonia. Although the incidence rate in 2002 was only 7.95%, which was lower than the national rate (10% - 20%), it had provided a large contribution (62.23%) for the total infant mortality rate in 2002.

The objective of this study was to investigate relationship between the factors of home environment, infants, and socioeconomic and the incidence of severe pneumonia in infants.

This was a case control study. The case was infants aged between 0 and 1 year, who lived in the District of East Lombok, were hospitalized in Selong General Hospital from January to June 2003 and diagnosed as having severe pneumonia by pediatrician in the hospital. Control consisted of patients with common cold who lived around the house of those infants. Total sample was 104 individuals, each 52 individuals in case and control groups. The dependent variable was infants with severe pneumonia, while the independent variables were the risk factors of home environment (density of bedroom inhabitants, room ventilation, room natural illumination, pollution from cooking smoke, cigarette smoke, mosquito repellent smoke, floor type, wall type, presence of primary infection, presence of poultry, and air humidity), factors of the infants (age, sex, low birthweight, and immunization status), and socioeconomic factors (parents' age, education, income, regularity in taking medications, and habit to search for treatment to non-medical healers). Data were collected using interview, observation, and measurement using questionnaire. Analysis was done descriptively to investigate subjects' frequency distribution in each variable and using statistical analysis to prove relationship between independent and dependent variables. Statistical analysis was carried out by means of multiple logistic regression with confidence interval of 95% and odds ratio to estimate risk. Software program used in the analysis was SPSS.

Results showed that there was only one significant variable, i.e., density of bedroom inhabitants, with $p = 0.002$ and $OR = 4.588$, which was at the range between 1.757 and 11.985. This indicated that infants who slept in a densely inhabited bedroom (more than 3 individuals in a bedroom sized less than 8 m2) might have a risk 4 - 5 times higher to suffer from severe pneumonia compared to those who slept not in densely inhabited bedroom. Other variables were found not as risk factors of severe pneumonia in infants.

In conclusion, by the finding that bedroom inhabitant density is a risk factor affecting the incidence of severe pneumonia among infants in the District of East Lombok, the author recommends the authorities, such as Health Office, Social Affairs Office, and Public Works Office, coordinated by head of villages,

to undertake some efforts to build houses according to the recommended standard from the Department of Health, particularly regarding its density rate. In addition, promotions should also be given to the community on healthy house, hazards that may occur due to unhealthy house, and habits in the household that may result in the occurrence of environmentally induced diseases.

ABSTRACT

THE RISK FACTOR OF SEVERE PNEUMONIA AMONG INFANTS IN THE DISTRICT OF EAST LOMBOK

Upper respiratory infection remains a primary health problem among infants and under fives in the District of East Lombok. To date, more than a half of the proportion of infant mortality results from severe pneumonia. Although the incidence rate in 2001 and 2002 was lower than the national rate, it has provided a large contribution for the total infant mortality rate.

The objective of this study was to investigate relationship between the factors of home environment, infants and socioeconomic and the incidence of severe pneumonia in infants.

This was a case control study. The case was infants aged between 0 and 1 year, who lived in the District of East Lombok, were hospitalized in Selong General Hospital from January to June 2003 and diagnosed as having severe pneumonia by pediatrician in the hospital. Control consisted of patients with common cold who lived around the house of those infants. Total sample was 104 individuals, each 52 individuals in case and control groups. The dependent variable was infants with severe pneumonia, while the independent variables were the risk factors of home environment (density of bedroom inhabitants, room ventilation, room natural illumination, pollution from cooking smoke, cigarette smoke, mosquito repellent smoke, floor type, wall type, presence of primary infection, presence of poultry, and air humidity), factors of the infants (age, sex, low birth weight, and immunization status), and socioeconomic factors (parents' age, education, income, regularity in taking medications, and habit to search for treatment to non-medical healers). Data were collected using interview, observation, and measurement using questionnaire. Analysis was done descriptively to investigate subjects' frequency distribution in each variable and using statistical analysis to prove relationship between independent and dependent variables. Statistical analysis was carried out by means of logistic regression with significance level of $p < 0.05$, and odds ratio to estimate risk.

Results showed that there was only one significant variable, i.e., density of bedroom inhabitants, with $p = 0.002$ and $OR = 4.588$, which was at the range between 1.757 and 11.985. This indicated that infants who slept in a densely inhabited bedroom might have a risk 4 - 5 times higher to suffer from severe pneumonia compared to those who slept not in densely inhabited bedroom. Other variables were found not as risk factors of severe pneumonia in infants.

Keywords : *severe pneumonia, infants, bedroom density*