# RINGKASAN

## Faktor Anak dan Lingkungan Perumahan yang Berhubungan dengan Kejadian Pnemonia pada Anak Batita di Kabupaten Banjar

Noorjannah

Pnemonia merupakan salah satu penyakit infeksi yang banyak menyerang bayi dan anak Balita. Situasi pnemonia di Kabupaten Banjar pada tahun 2000 berdasarkan pola kematian pasien rawat inap di rumah sakit pnemonia menduduki urutan kedua (20%) pada neonatus dan urutan pertama (33,3%) pada bayi, kemudian berdasarkan pola penyakit rawat jalan Puskesmas pnemonia menduduki urutan keenam baik pada bayi maupun anak Balita. Studi kepustakaan menyebutkan bahwa faktor anak dan perumahan berkaitan erat dengan kejadian pnemonia pada anak Balita karena penularan penyakit ini terjadi melalui pernapasan dan sebagian besar waktu anak dihabiskan di dalam rumah.

Tujuan penelitian ini adalah untuk menganalisis besarnya hubungan antara faktor anak dan perumahan dengan kejadian pnemonia pada anak Batita di Kabupaten Banjar

Penelitian ini menggunakan rancangan penelitian kasus kontrol, sampel kasus adalah anak Batita berusia 12 – 35 bulan yang didiagnosis pnemonia oleh dokter di sarana pelayanan kesehatan dalam periode bulan April – Juni 2003 dan bertempat tinggal di wilayah Kabupaten Banjar, sedangkan sampel kontrol adalah anak Batita berusia 12-35 bulan yang bertempat tinggal di sekitar kasus/penderita tetapi tidak menderita pnemonia. Besar sampel 150 terdiri dari 75 kasus dan 75 kontrol. Variabel tergantung pada penelitian ini adalah kejadian pnemonia pada anak Batita, sedangkan variabel bebas yang diteliti adalah umur, sex, status imunisasi, status gizi 1 bulan sebelum sakit, berat badan lahir, suplementasi viatamin A, ventilasi rumah, kelembaban, pencahayaan matahari, lokasi rumah, jenis rumah, jenis lantai, jenis dinding, letak dapur, lubang asap, kepadatan hunian, adanya sumber penularan, asap rokok, asap dapur, dan asap obat anti nyamuk. Pengumpulan data dilakukan dengan cara wawancara menggunakan kuesioner yang terstruktur, observasi, dan pengukuran. Analisis data dilakukan secara deskriptif dan inferensial. Analisis deskriptif disajikan dalam bentuk tabulasi silang dan prosentase. Analisis inferensial menggunakan uji regresi logistik dengan tingkat signifikansi 95% ($p<0,05$) untuk mengetahui hubungan antara variabel bebas dengan variabel tergantung serta untuk mengetahui estimasi besarnya risiko (*Odds Ratio*) dari faktor risiko terhadap kejadian pnemonia pada anak Batita.

Hasil penelitian ini menunjukkan variabel yang mempunyai hubungan bermakna dengan kejadian pnemonia pada anak Batita adalah 1) adanya sumber penularan dengan OR=13,497 (95% CI: 3,109-58,590) yang berarti anak Batita yang tinggal serumah dengan penderita pnemonia mempunyai risiko menderita pnemonia 13,497 kali dibandingkan yang tidak ada penderita ISPA/ pnemonia serumah; 2) pencahayaan matahari yang kurang baik OR=11,942 (95% CI: 2,583 – 55,215), yang berarti anak Batita yang tinggal di rumah dengan kondisi pencahayaan mataharinya kurang baik mempunyai risiko menderita pnemonia 11,942 kali dibandingkan yang tinggal di rumah dengan kondisi pencahayaan mataharinya baik; 3) status gizi kurang OR= 4,985 (95% CI: 1,853 – 13,413), yang berarti anak Batita yang bersatus gizi kurang mempunyai risiko menderita pnemonia 4,985 kali dibandingkan yang berstatus gizi baik; 4) rumah padat huni OR=4,366 (95%

CI: 1,635 - 11,659), yang berarti anak Batita yang tinggal di rumah padat huni mempunyai risiko menderita pnemonia 4,366 kali dibandingkan yang tinggai di rumah yang tidak padat huni; 5) suplementasi vitamin A OR= 3,537 (95% CI: 1,509 – 8,291), yang berarti anak Batita yang tidak mendapatkan vitamin A secara lengkap mempunyai risiko menderita pnemonia 3,537 kali dibandingkan yang mendapatkannya secara lengkap; dan 6) umur 12-23 bulan OR=3,114 (95% CI: 1,287 – 7,536), yang berarti anak Batita berumur 12-23 bulan mempunyai risiko menderita pnemonia 3,114 kali dibandingkan yang berumur 24-35 bulan. Penelitian ini tidak menemukan adanya hubungan antara jenis kelamin, status imunisasi, BBLR, kelembaban ruangan, ventilasi rumah, lokasi rumah, jenis rumah, jenis lantai, jenis dinding, dapur terpisah/tidak, lubang asap, asap rokok, asap dapur, dan asap obat anti nyamuk dengan kejadian pnemonia pada anak Batita di Kabupaten Banjar.

Kesimpulan dari penelitian ini menunjukkan bahwa variabel yang berhubungan dengan kejadian pnemonia pada anak Batita di Kabupaten Banjar adalah adanya sumber penularan, pencahayaan matahari di dalam rumah yang kurang baik, status gizi buruk/kurang, rumah padat huni, suplementasi vitamin A yang tidak lengkap, dan umur 12 – 23 bulan. Sehubungan dengan hal tersebut, saran yang diusulkan adalah memberikan penyuluhan kepada masyarakat tentang pencegahan dan deteksi dini gejala pnemonia/ ISPA, perbaikan gizi dan perawatan kesehatan anak Batita, serta sanitasi perumahan, kemudian bila ada anggota keluarga yang menderita ISPA agar sesegera mungkin diberikan pengobatan supaya tidak berlanjut pada penyakit pnemonia dan tidak menular kepada anggota keluarga lainnya.

## SUMMARY

### The Factors of Children and Housing Environment Related to the Incidence of Pneumonia among Underthree Children in the District of Banjar

**Noorjannah**

Pneumonia is one of infectious diseases commonly found among infants and underfives. At the District of Banjar in year 2000, based on mortality pattern in hospitalized patients, pneumonia was at the second rank (20%) among the neonates, and at the first rank (33.3%) among the infants. In the outpatients visiting community health centers, pneumonia was at the sixth rank, either in infants or underfives. Literature study reveals that the factors of children and housing are related to the incidence of pneumonia among underfives, since the transmission of the disease is airborne. It is transmitted through inhaled air for respiration, while children spend most of their time at home.

The objective of this study was to analyze relationship between the factors of children and housing and the incidence of pneumonia among underthree children in the District of Banjar.

This study used case control design. The case was underthree children aged 12 - 35 months diagnosed with pneumonia by the clinicians in health care centers during a period between April and June 2003, and lived in the District of Banjar. Control was underthree children of the same age lived nearby those in case group. Total sample was 150 individuals, comprising 75 in case and 75 in control group. The dependent variable in this study was the incidence of pneumonia in underthree children, while the independent variables were age, sex, immunization status, nutritional status, birthweight, vitamin A supplementation, house ventilation, humidity, sunlight, house location, house type, floor type, wall type, kitchen location, smoke hole, house density, presence of transmission source, cigarette smoke, kitchen smoke, and mosquite repellent smoke. Data were collected by means of structure interview, observation, and measurement. Data analysis ware done descriptively and Inferential. The descriptive analysis was presented as cross tabulation and percentage. Inferential analysis was done using logistic regression test with significance level of 95% ($p < 0.05$) to identify relationship between the independent and dependent variables, and to estimate the rate (Odds Ratio) of the risk factors of the incidence of pneumonia in underthree children.

Results revealed that the variables having significant relations with the incidence of pneumonia in underthree children were 1) the presence of transmission source, with OR = 13,497 (95% CI: 3,109 – 58,590), indicating that underthree children who lived with pneumonia patient had a risk of being affected with pneumonia 13,497 times higher; 2) sunlight in house with OR = 11,942 (95% CI: 2,583 – 55,215), demonstrating that underthree children lived in a house with poor sunlight had a risk of pneumonia 11,942 times higher; 3) lower nutritional status, with OR = 4,985 (95% CI: 1,853 – 13,413), showing that underthree children with lower nutritional status had a risk of pneumonia 4,985 higher; 4) densely inhabited house, with OR = 4,366 (95% CI: 1,635 - 11,659), indicating that those who lived in densely inhabited house had a risk of pneumonia 4,366 times higher; 5) vitamin A supplementation, with OR = 3,537 (95% CI: 1,509 – 8,291), indicating that underthree children who received incomplete vitamin A supplementation

had a risk of pneumonia 3,537 times higher; 6) age of 12 - 23 months, with OR = 3,114 (95% CI: 1,287 – 7,536), indicating that those children whose aged 12 - 23 months had a risk of pneumonia 3,114 times higher compared to those aged 24 - 35 months. This study found no relations between sex, immunization status, lower birthweight, room humidity, ventilation, house location, house type, floor type, wall type, kitchen location, smoke hole, cigarette smoke, kitchen smoke, and mosquito repellent smoke and the incidence of pneumonia among underthree children in the District of Banjar.

It can be concluded that the variables having relations with the incidence of pneumonia in underthree children in the District of Banjar were the presence of transmission source, lived in a house with poor sunlight, lower nutritional status, densely inhabited house, incomplete vitamin A supplementation, and age of 12 - 23 months. Herewith those case, it suggest for giving the enlightenment to public about prevention and early detection of peumonia/ ISPA, nutrisional development and health care underthree children, and housing sanitation. Then, if there was a family member who having ISPA, they must immediately threated so it would not advance to pneumonis and would not infects another family member.

## ABSTRACT

### The Factors of Children and Housing Environment Related to the Incidence of Pneumonia among Underthree Children in the District of Banjar

**Noorjannah**

Pneumonia in the District of Banjar still become an important health problem, in spite of the disease tackling program has been performed in long time period. Some teories reveal that the factors of children and housing are related to the incidence of pneumonia.

The objective of this study was to analyze relationship between the factors of children and housing and the incidence of pneumonia among underthree children in the District of Banjar.

This study used case control design. The case was underthree children aged 12 - 35 months diagnosed with pneumonia by the clinicians in health care centers during a period between April and June 2003, and lived in the District of Banjar. Control was underthree children of the same age lived nearby those in case group. Total sample was 150 individuals, comprising 75 in case and 75 in control group. The dependent variable in this study was the incidence of pneumonia in underthree children, while the independent variables were age, sex, immunization status, nutritional status, birthweight, vitamin A supplementation, house ventilation, humidity, sunlight, house location, house type, floor type, wall type, kitchen location, smoke hole, house density, presence of transmission source, cigarette smoke, kitchen smoke, and mosquite repellent smoke. Data analysis ware done descriptively and Inferential. The descriptive analysis was presented as cross tabulation and percentage. Inferential analysis was done using logistic regression test with significance level of 95% ($p < 0.05$) to identify relationship between the independent and dependent variables, and to estimate risk (Odds Ratio) of the risk factors of the incidence of pneumonia in underthree children.

Results revealed that the variables having significant relations with the incidence of pneumonia in underthree children were the presence of transmission source, with OR =13,497 (95% CI: 3,109 – 58,590); sunlighting in house with OR = 11,942 (95% CI: 2,583 – 55,215); lower nutritional status, with OR = 4,985 (95% CI: 1,853 – 13,413); densely inhabited house, with OR = 4,366 (95% CI: 1,635 - 11,659) ;vitamin A supplementation, with OR = 3,537 (95% CI: 1,509 – 8,291); and age of 12 - 23 months, with OR = 3,114 (95% CI: 1,287 – 7,536), whereas another variables did not show any relations to incidence of pneumonia among underthree children in the District of Banjar.

From this study can be suggested that for giving the enlightenment to public about prevention and early detection of peumonia/ ISPA, nutrisional development and health care underthree children, and housing sanitation. Then, if there was a family member who having ISPA, they must immediately threated so it would not advance to pneumonis and would not infects another family member.


*Keywords : Pneumonia, housing, child underthree years old*