Analisis pajanan timbal di air minum dan makanan terhadap kejadian hipertensi penduduk kawasan industri dan non industri Kabupaten Gresik Jawa Timur (analisis lanjut riset khusus pencemaran lingkungan badan penelitian dan pengembangan kesehatan tahun 2012) = Analysis of lead exposure in water and food with the hypertension in residents living at industrial and non industrial area gresik east java advanced analysis of special research on environmental contamination of agency for health research and develop

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Abstrak

Konsentrasi timbal melebihi baku mutu di perairan Kabupaten Gresik akibat limbah industri dapat menjadi risiko gangguan kesehatan kronis seperti hipertensi. Tujuan penelitian ini untuk menganalisis pajanan timbal di air minum dan makanan terhadap kejadian hipertensi penduduk kawasan industri dan non industri. Penelitian ini menggunakan desain studi Public Health Assessment dan analisis spasial pada 1050 responden usia dewasa di Kabupaten Gresik. Data yang digunakan berupa data sekunder Riset Khusus Pencemaran Lingkungan Badan Penelitian dan Pengembangan Kesehatan tahun 2012. Tingkat risiko akibat pajanan timbal di air minum kawasan industri (RQrealtime:0,21039; RQlifespan:0,28690) memiliki kecenderungan berisiko lebih tinggi daripada kawasan non industri (RQrealtime:0,01692; RQlifespan:0,01692). Tingkat risiko tertinggi akibat pajanan timbal di makanan kawasan industri pada beras (RQrealtime:12,1544; RQlifespan:16,2481) sedangkan kawasan non industri pada jagung (RQrealtime:9,6615; RQlifespan:9,4970). Penduduk terpajan timbal tidak memenuhi syarat pada air minum memiliki risiko lebih tinggi dibandingkan terpajan timbal memenuhi syarat (OR: 2,693 95%CI: 0,982-7,386) untuk mengalami kejadian hipertensi setelah dikontrol oleh variabel usia, jenis kelamin dan obesitas. Analisis spasial menunjukkan sebaran timbal di media lingkungan tidak memiliki pola persebaran tertentu.
.....Lead concentrations have been exceeded water quality standards in Gresik because of industrial waste could be a risk of chronic health problems such as hypertension. The objective of this study was to analyze lead exposure in drinking water and food with hypertension in population at industrial and non-industrial area. This design study of research was Public Health Assessment and spacial analysis on the 1050 adults at Gresik. Data used in the research was secondary data from Special Research Environmental Contamination of Agency for Health Research and Development in 2012. The average of risk quotient due to lead exposure in drinking water at industrial area (RQrealtime: 0.21039; RQlifespan: 0.28690) was higher than non-industrial area (RQrealtime: 0.01692; RQlifespan: 0.01692). The highest of risk quotient due to lead exposure at industrial area on food was rice (RQrealtime: 12.1544; RQlifespan: 16.2481) while at non-industrial area was corn (RQrealtime: 9.6615; RQlifespan: 9.4970). Respondent with not qualified lead exposure in drinking water had higher risk than respondent with qualified lead exposure in drinking water (OR: 2.693 95% CI: 0.982-7.386) to experience hypertension after being controlled by the variables of age, sex and obesity. Spatial analysis showed distribution of lead in environmental media did not follow the specific distribution pattern.