

## Efek suplementasi seng pada pasien dewasa dengan diare akut di Rumah Sakit Pusat Pertamina Jakarta = Effect of zinc supplementation on acute diarrhea in hospitalized adults patients in Pertamina Central Hospital Jakarta

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### Abstrak

#### [<b>ABSTRAK</b><br>

Latar Belakang: Diare akut adalah masalah umum di negara berkembang seperti Indonesia; penyakit ini banyak ditemukan dalam praktek sehari-hari dengan angka morbiditas dan mortalitas yang cukup tinggi. Pada beberapa Rumah Sakit di Jakarta ditemukan bahwa pasien diare akut dewasa mengalami defisiensi kadar seng sebesar 69.3%.

Pemberian seng sudah terbukti bermanfaat untuk pengobatan diare akut pada anak.

Tujuan: Mengetahui dampak suplementasi seng sebagai terapi alternatif / adjuvant untuk pengobatan diare akut pada pasien dewasa, dengan membandingkan lama berlangsung dan berat-ringan gejala pada kelompok pasien yang diberikan dan yang tidak diberikan suplementasi seng.

Metode: Double blind randomized controlled trial dilakukan pada penelitian ini untuk mengetahui efek suplementasi seng terhadap durasi dan gejala gastrointestinal pada pasien diare akut rawat inap di RS Pusat Pertamina di Jakarta selama periode Januari-Desember 2013. Analisis data dilakukan dengan menggunakan uji chi-square ( $\chi^2$ ) untuk perbandingan durasi diare dan uji general linear model (GLM) untuk menilai tren perubahan gejala penyerta diare.

Hasil: Analisis data dari 84 pasien yang dikelola: 30 pasien pria [seng 19, plasebo 11] dan 54 pasien wanita [seng 23, plasebo 31] ~ (p 0.111) memperlihatkan pemberian suplementasi seng bermakna mengurangi durasi diare akut (p 0.027) dan bermakna mengurangi gejala mual (p 0.032). Selain itu ada tren perbaikan pada sebagian gejala penyerta diare akut, seperti sakit perut, frekuensi b.a.b., konsistensi feses, gejala muntah, kembung, dan gangguan aktivitas sehari-hari.

Simpulan: Pemberian suplementasi seng bermakna membuat durasi diare akut lebih singkat dan bermakna mengurangi gejala mual, serta perbaikan pada sebagian gejala gastrointestinal.

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#### <b>ABSTRACT</b><br>

Background: Acute diarrhea is a common problem in developing countries such as Indonesia; which is found in everyday practice with quite high morbidity and mortality rate. It was revealed in adult acute diarrhea patients in several hospitals

in Jakarta the levels of zinc deficiency was 69.3%. Zinc has been proven to be beneficial in the treatment of acute diarrhea in pediatric patients.

**Objective:** To discover the effectiveness of zinc supplementation as an adjuvant therapy in acute diarrhea for adult patients by comparing the duration and the severity of signs and symptoms of acute diarrhea between the zinc and placebo group.

**Methods:** A double blind randomized controlled trial is done to find out about the effect of zinc supplementation to the duration, signs and symptoms on acute diarrheal in hospitalized adults patients in Pertamina Central Hospital in Jakarta from January-December 2013. The data is analyzed using chi-square test ( $\chi^2$ ) for comparing the duration of diarrhea and general linear model (GLM) to assess trend changes accompanying symptoms of diarrhea.

**Results:** Analysis of the data from 84 patients: 30 males [19 zinc, 11 placebo] and 54 females [23 zinc, 31 placebo] ~ ( $p$  0.111) obtained zinc supplementation significantly reduced the duration of acute diarrhea ( $p$  0.027) and significantly reduce the symptoms of nausea ( $p$  0.032). In addition there is trend of improvement in some acute diarrhea associated symptoms, such as abdominal pain, frequency of diarrhea, stool consistency, vomiting, bloating, and disruption of daily activities.

**Conclusion:** Zinc supplementation significantly reduce the duration of diarrhea, significantly reduce the symptoms of nausea; besides, improving some symptoms accompanying acute diarrhea.;**Background:** Acute diarrhea is a common problem in developing countries such

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