

ANALISIS KONSUMSI ZAT BESI, *ENHANCER* ZAT BESI, DAN *INHIBITOR* ZAT BESI PADA IBU HAMIL BERDASARKAN DATA STUDI DIET TOTAL (SDT) TAHUN 2014 DI INDONESIA

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INTISARI

Latar Belakang: Ibu hamil merupakan kelompok paling rentan terhadap anemia. Defisiensi zat besi menjadi penyebab utama terjadinya anemia. Bioavailabilitas zat besi tidak hanya ditentukan oleh jumlah asupan, tetapi juga interaksi yang terjadi selama proses metabolisme. Interaksi dalam proses penyerapan zat besi melibatkan *enhancer* dan *inhibitor* zat besi.

Tujuan: Mengetahui konsumsi zat besi, *enhancer* zat besi, dan *inhibitor* zat besi pada ibu hamil di Indonesia.

Metode: Jenis penelitian observasional dengan rancangan *cross-sectional* menggunakan data sekunder Studi Diet Total (SDT) tahun 2014. Sebanyak 644 ibu hamil yang berpartisipasi dalam SDT yang memenuhi kriteria inklusi dan eksklusi dinilai tingkat konsumsinya. Survei konsumsi berupa hasil *food recall* 24 jam diolah menggunakan *Software Nutrisurvey* dan Tabel Komposisi Pangan Indonesia (TKPI) untuk menggambarkan konsumsi zat besi, *enhancer* zat besi, dan *inhibitor* zat besi. Identifikasi *enhancer* dan *inhibitor* zat besi juga dilakukan secara deskriptif dengan menggunakan *foodlist*. Analisis dilanjutkan menggunakan statistik dengan menyertakan berbagai karakteristik pada ibu hamil.

Hasil: Hasil penelitian ini menemukan bahwa karakteristik sosial demografi ibu hamil berkorelasi dengan konsumsi zat besi, *enhancer* zat besi, dan *inhibitor* zat besi. Pendidikan, pekerjaan, status ekonomi, dan tempat tinggal berhubungan secara signifikan dengan konsumsi zat besi pada ibu hamil ($p\text{-value} < 0,05$). Asam malat dan asam tartrat merupakan *enhancer* zat besi yang paling terkait dengan karakteristik sosial demografi ibu hamil. Sementara untuk *inhibitor* zat besi, sebagian besar karakteristik sosial demografi ibu hamil berhubungan dengan konsumsi kalsium, serat, dan pektin. Dalam penelitian ini, tidak ditemukan adanya keterkaitan antara kepunyaan balita dengan konsumsi zat besi, *enhancer* zat besi, dan *inhibitor* zat besi pada ibu hamil ($p\text{-value} > 0,05$).

Kesimpulan: Faktor paling dominan yang berasosiasi dengan konsumsi zat besi, *enhancer* zat besi, dan *inhibitor* zat besi pada ibu hamil di Indonesia adalah status ekonomi, tingkat pendidikan, dan tempat tinggal.

Kata Kunci: Anemia ibu hamil, Anemia defisiensi besi, Konsumsi zat besi, *Enhancer* zat besi, *Inhibitor* zat besi

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ANALYSIS OF IRON, IRON ENHANCERS AND IRON INHIBITORS CONSUMPTION ON PREGNANT WOMEN BASED ON TOTAL DIETARY STUDY (SDT) YEAR 2014 IN INDONESIA

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ABSTRACT

Introduction: Pregnant women are the most vulnerable to anemia. Iron deficiency is a major cause of anemia. Iron bioavailability is not only determined by the amount of intake, but also the interactions that occur during the metabolic process. Interactions in the iron absorption process involve iron enhancers and inhibitors.

Objective: The general objective of this study was to determine consumption of iron, iron enhancers, and iron inhibitors on pregnant women in Indonesia.

Methods: This research is observational study design with cross sectional approach using secondary data from Total Dietary Study (SDT) year 2014. Total of 644 pregnant women who participated in SDT fulfilling the inclusion and exclusion criteria were assessed for their level of consumption. Consumption survey in the form of 24-hour Dietary Recall processed using Nutrisurvey software and Indonesian Food Composition Table (TKPI) to describe the consumption of iron, iron enhancers, and iron inhibitors. The identification of iron enhancers and inhibitors was performed descriptively using foodlist. The analysis continued using statistics by including various characteristics in pregnant women.

Result: This study found that socio-demographic characteristics of pregnant women correlated with the consumption of iron, iron enhancers, and iron inhibitors. Education, occupation, economic status, and residence were significantly associated with iron intake on pregnant women ($p\text{-value} < 0,05$). Malic acid and tartaric acid are iron enhancers that most closely related to the socio-demographic characteristics of pregnant women. As for iron inhibitors, most of the socio-demographic characteristics of pregnant women are associated with consumption of calcium, fiber, and pectin. In this study, there was no association between having children under 5 years with iron consumption, iron enhancers, and iron inhibitors on pregnant women ($p\text{-value} > 0,05$).

Conclusion: The most dominant factors associated with consumption of iron, iron enhancers, and iron inhibitors on pregnant women in Indonesia are economic status, education level, and residence.

Keywords: Anemia in pregnancy, Iron deficiency anemia, Iron consumption, Iron Enhancer, Iron Inhibitor

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