Status Vitamin B-12, Asam Folat, Antropametri dan Prof i Lipid pada Lanjut Usia Binaan Puskesmas di Jakarta Selatan

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Abstrak

Tujuan : Untuk mengetahui gambaran status vitamin B-12, asam folat, nutrisi dan profit lipid serum pada lanjut usia, agar dapat dimanfaatkan untuk pertimbangan pencegahan dan terapi penyakit jantung ; coroner (PJK) dan aterosklerosis.

Tempat : Sepuluh puskesmas kecamatan di Jakarta Selatan,

Cara : Studi cross-sectional pada lanjut usia z 60 tahun, subjek dipilih secara acak pada tingkat puskesmas. Data yang dikumpulkan meliputi sosio-demografi; pola makan; asupan energi, karbohidrat, lemak, protein, kolesterol, vitamin B-12, asam folat; kadar vitamin B-12; asam folat dan lipid serum, indeks massa tubuh (A.fl) dan rasio LPe-LPa.

Hasil : Prevalensi kekurangan vitamin B-12 serum 34,6% dan kekurangan asam folat serum 34,0%. Konsentrasi vitamin B-12 serum dan asam folat serum pada pria lebih rendah dari wanita. Pada pria dan wanita vitamin B-12 serum kelompok umur z 70 tahun lebih rendah dibanding kelompok umur 60-69 tahun. Prevalensi hiperkolesterolemia dan kolesterol LDL serum yang tinggi (z 160 mg/dL) adalah, 42,6% dan 24,1%. Pada pria dan wanita kolesterol total serum pada kelompok umur z 70 tahun lebih rendah dibanding kelompok umur 60-69 tahun. Di lain pihak kolesteroI HDL serum pada pria dan wanita kelompok umur Z 70 tahun lebih tinggi dibanding kelompok umur 60-69 tahun. Rata-rata IMl' untuk pria 23,9 dan wanita 24,1 dan rata-rata rasio LPe-LPa untuk pria 0,93 dan wanita 0,85. Pada lanjut usia dengan konsentrasi vitamin B-I2 serum < 350 pg/mL berkorelasi positif dengan kolesterol HDL serum (r = 0,29; P = 0,03), tetapi tidak berkorelasi dengan kolesterol total serum, kolesterol LDL serum, rasio kolesterol total/ kolesterol HDL dan rasio kolesterol LDLlkolesterol HDL. Di lain pihak lanjut usia dengan konsentrasi vitamin B-I2 serum Z 350 mg/mL tidak berkorelasi dengan lipid serum.

Kesimpulan : Melalui pendekalan faktor resiko PiK, prevalensi kekurangan vitamin B-12 dan kekurangan asam folat di Indonesia relatif tinggi dan sesuai dengan penelitan-penelitian yang telah dilakukan di negara-negara maju. Interaksi antara vitamin B-12 serum dan lipid serum belum dapat ditentukan sebagai interaksi yang linier tanpa adanya informasi mengenai homosistein serum. Kecukupan vitamin B-12 serum untuk lanjut usia sangatlah esensial untuk memperkecil terjadinya dislipidemia sebagai salah satu faktor resiko PJK.

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<i>Objective : To determine vitamin B-l2, folic acid, anthropometric and serum lipid profiles of the Indonesian elderly which are considered to be important in the prevention and treatment of coronary atherosclerosis.

Place : Ten PHC in the district of South Jakarta.

Methods : A cross-sectional study on the elderly (z 60 year) was carried out in 10 PHCs, Subjects were drawn randomly at the PHC levels. Data collected were sosio-demography; food habits; intakes of energy, carbohydrate, fat, protein, cholesterol, vitamin B-12, and folic acid; serum vitamin B-12, serum folic acid, serum lipids; anthropometry [body mass index (BMI) and waist-hip ratio].

Results : The prevalence of biochemical vitamin B-12 and folic acid deficiencies were 34.6% and 34.0% respectively. Serum vitamin B-12 and folic acid concentrations of the elderly men were lower than those of the elderly women. Serum vitamin B-12 of both elderly men and women aged Z 70 years was lower than their younger counterparts aged 60-69 years. The prevalence of hypercholesterolemia and high serum LDL cholesterol (z 160 mg/di.) was 42.6% and 24.1% respectively. Mean serum total cholesterol of both elderly men and women aged z 70 years was lower than those aged 60-69 years old. On the other hand, serum HOL cholesterol of both elderly men and women aged z 70 years was higher than their younger counterparts aged 60-69 years. Mean BMI values were 23.9 kglm2 for the elderly men and 24,1 kglrn2 for the elderly women. Mean waist-hip ratios for the elderly men and women were 0.93 and 0.85 respectively, In the elderly subjects with low serum vitamin B-12 (< 350 pg/mL), positive correlations were found between serum vitamin B-12 and serum HDL cholesterol (r 0.29; P = 0.03), but not with any of serum total cholesterol, serum LDL cholesterol, total cholesterol/HDL cholesterol ratio, and LDLIHDL ratio. On the other hand, in the elderly subjects with normal and high serum vitamin B-12 (z 350 pglmL), there were no correlations between serum vitamin B-I2 and serum lipids.

Conclusions: Using the CHD-risk approach, the prevalence of biochemical vitamin B-12 and folic acid deficiencies of the Indonesian elderly was relatively high and comparable with existing studies in developed countries. Without information on serum homocysteine concentration, the interactions between serum vitamin B-12 and lipids were not linear. Clearly, adequacy of serum vitamin B-12 for the elderly is essential to minimize disorder of lipid metabolism as one amongst other CHD risk factors.</i>