TWO YEARS STUDY OF NUTRITION COUNSELING INTERVENTION TO IMPROVE PROTEIN ENERGY INTAKE AND NUTRITION STATUS IN CHRONIC KIDNEY DISEASE ON HEMODIALYSIS

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Objectives: The prevalence of protein energy malnutrition in CKD is 50 – 65%. Nutrient intake is contribute to malnutrition in dialysis population. Although hemodialysis patients are recommended to have a protein intake of ≥ 1.2 g/kg IBW and energy intake of 35 kcal/kg/day, nutritional survey indicate actual protein and energy intake are inadequate in most patient. The aim of this study was to find out the association of nutrition counseling intervention with protein energy intake and nutrition status.

Methods: This is a cross sectional study performed in 2016 – 2018 (June 2016 to January 2018). Nutrition status was examined using Subjective Global Assessment (SGA) and Intervention of nutrition care process by individual counseling to patients and family.

Results: Dietary protein energy intakes were assessed with food recall to 100 patients consist of 52% male and 42% female; 49±13.3 years old. Energy requirement is 1861±272 kcal and protein 64±9.3 gram. Initial assessment found patient’s BMI 23.1±4.5 kg/m²; energy intake 1320±310 kcal, protein 42 ± 3.5 gram with 17% malnutrition (SGA B & C) and 14% underweight. At two times of nutrition counseling intervention in showed there is no significant change in protein energy intake (1420 ± 420 kcal; 44 ± 4.1 gram; p=0.07), patients body weight (59 ± 8.6 kg; p=0.082), and nutrition status (23.1 ± 4.5 kg/m²; p=0.092). After two years of intervention in indicate protein energy intake and SGA score have significantly increased (1920 ± 320 kcal; 68 ± 5.1 gram; SGA B & C 13%; Underweight 15%; p<0.05) however there is no significant increase in body weight (60 ± 7.1 kg; p>0.05) and nutrition status (23 ± 4.3 kg/m²; p>0.05).

Conclusions: Continuing nutrition counseling every six months and monitoring malnutrition patients every month is the main nutrition intervention in dialysis patient to prevent and address protein energy malnutrition problem.