

house officers (first year residents) reported that a 'renal diet' should be low in protein, salt, potassium, phosphate but only 38% of medical officers reported the same. While 100% of medical doctors stated that renal patients are at risk of compromised nutrition, only 45% of them would refer all renal patients to a dietitian. 47% of nurses believed that 'renal diet' low in potassium, salt, phosphate and protein should be prescribed to all patients with chronic renal failure. Only 38% of nurses were aware of the need for higher protein diet for patients on dialysis. In conclusion, there is a need to improve the knowledge of medical doctors and nursing staff in renal nutrition.

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187 PREVALENCE OF COMPROMISED NUTRITIONAL STATUS IN HOSPITALIZED PATIENTS WITH ACUTE AND CHRONIC RENAL FAILURE

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Restrictive renal diet (low protein, low potassium, low phosphate and low salt) is frequently ordered for patients with acute and chronic renal failure. This is however not necessary for all renal patients, who are at risk of compromised nutrition. Nutritional status of 60 patients (35 males, 25 females; mean age: 67 ± 17 ; mean BMI: $23.4 \pm 4.6 \text{ kg/m}^2$) with renal failure was assessed using the Subjective Global Assessment (SGA). 53%, 45% and 2% of patients were classified as well nourished, mild-moderately malnourished and severely malnourished respectively. SGA ratings had the strongest correlation with serum albumin ($r = -0.226$, $p = 0.082$) compared with age ($r = 0.153$, $p = 0.243$), BMI ($r = -0.204$, $p = 0.139$) and eGFR ($r = -0.055$, $p = 0.679$). Patients with acute and chronic renal failure were equally likely to have compromised nutritional status. Similarly there was no difference in nutritional status between patients with and without dialysis ($p = 0.498$). In conclusion, the prevalence of compromised nutritional status in hospitalized renal patients was high at 47%. Dietetic intervention is necessary to prevent further decline in nutritional status of this group of patients. Dietary restrictions should be personalized and based on biochemical profile.

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188 SERUM THIAMINE LEVEL DURING THE INITIATION TERM OF HEMODIALYSIS

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It has been reported that thiamine deficiency is often seen in hemodialysis (HD) patients because of dietary restrictions as well as its loss during dialysis sessions. We studied the serum thiamine level before and after dialysis sessions during the initiation term of HD. Forty CKD patients who hospitalized to newly begin chronic HD were studied. We compared the serum thiamine levels at the first and the last HD sessions in our hospital.

The serum thiamine level at the first HD decreased from 25.47 ± 10.07 to $23.55 \pm 9.46 \text{ ng/ml}$ (before and after HD session, respectively, $p < 0.05$, paired t -test). At the last HD session in our hospital, the serum level of thiamine also decreased from 27.44 ± 11.37 to $25.71 \pm 10.80 \text{ ng/ml}$ (before and after HD session, respectively, $p < 0.05$).

Although water-soluble vitamins such as thiamine are lost during dialysis session, serum thiamine level tended to restore spontaneously during the hospitalization (25.47 ± 10.07 vs. 27.44 ± 11.37 , pre HD value, $p = 0.09$). A three months-follow up measurement after initiation of HD, which is now in progress (so far $n = 3$), revealed increase of serum thiamine level in all patients ($35.33 \pm 7.37 \text{ ng/ml}$). It may reflect the improvement of nutritional status after the initiation of HD, and suggests the loss of thiamine by HD procedure can be covered.

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189 RELATIONSHIP BETWEEN SALT INTAKE AND GNRI IN ELDERLY DIALYSIS PATIENTS

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While the recommended salt intake in dialysis patients is no more than 5 g/day in the KDOQI guideline, and 6 g/day in the JSH 2009 guideline, reducing salt consumption is difficult on the traditional Japanese diet. If a patient is malnourished, a low-salt diet poses a risk of aggravating the nutritional deficiency. Since elderly dialysis patients have nutritional deficiencies underlying their condition, the recommended low-salt diet may prevent these patients from receiving adequate nutrition. In the present study, factors associated with nutritional status in the elderly were assessed using the Geriatric Nutritional Risk Index (GNRI), which is considered to correlate with predictor of mortality among dialysis patients. Participating patients were anuric, had been maintained on dialysis for at least 2 years, and were 65 years of age or older. Factors assessed for their possible correlations with GNRI were primary disease, presence of spouse, presence of cohabiting family, weight gain, and estimated salt intake. We analyzed 36 patients (age 74.3 ± 5.4 years, 50% males). GNRI was 90.9 ± 7.7 , and salt intake (8.02 ± 1.94) correlated with GNRI ($r = 0.41$, $P = 0.02$). No correlations were detected for the presence of spouse or cohabiting family, which would have contributed to nutrition. In conclusion, the higher the salt intake, the better GNRI tended to be. This raised the possibility that it would be advantageous to avoid excessive salt restriction in nutritional training.

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190 EVALUATION RESEARCH OF THE NATIONAL KIDNEY FOUNDATION OF HAWAII (NKFH) KIDNEY EARLY DETECTION SCREENING (KEDS) PROGRAM IN HAWAII UTILIZING A CULTURALLY COMPETENT GRASSROOTS COMMUNITY-BASED APPROACH

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In 2005, the National Kidney Foundation of Hawaii (NKFH) developed the KEDS program to raise greater awareness about individual risk for kidney disease and stimulate early screening of risk factors among people in Hawaii.

The objective of this study was to collect formative program evaluation data and observe for trends in chronic kidney disease (CKD) prevalence and risk in selected communities in Hawaii.

The KEDS participants, regardless of health insurance or health condition, ethnicity, or gender, were encouraged to participate without a fee. Nine hundred twenty-one were included in this evaluation.

Data analyses included crosstabs and Pearson's chi-square. The findings of the program showed increased BMI levels for Native Hawaiians. Also, other ethnic groups in Hawaii were also analyzed. This project provides an evaluation of the KEDS program and useful data on the ethnically diverse participants in Hawaii.

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191 ASSOCIATION BETWEEN 25-HYDROXYVITAMIN D AND CARDIAC TROPONIN T LEVEL IN KOREAN ESRD PATIENTS

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Growing evidences have shown that 25-hydroxyvitamin D [25(OH)D] deficiency may be associated with cardiovascular (CV) mortality in ESRD patients. However, it has not been sufficiently investigated in the Northeast Asian ESRD population. From 2009 to 2011, 208 patients have newly commenced renal replacement therapy (RRT) in our unit. Among them, 136 patients who were measured for 25(OH)D and cardiac troponin T (cTnT) level at the start of RRT were analyzed (M:F = 74:62, Age 54.1 ± 14.7 yrs, DM 53.7%). The patient experienced coronary artery disease within 3 months was excluded. Patients divided into 3 groups according to cTnT level: group 1 ($n = 36$), cTnT not detected ($< 0.01 \text{ ng/ml}$); group 2 ($n = 64$), $0.01 \leq \text{cTnT} < 0.1 \text{ ng/ml}$; group 3 ($n = 36$), $\text{cTnT} \geq 0.1 \text{ ng/ml}$. Median 25(OH)D levels were 12.1 ng/ml (IQR, 8.9–15.9), 10.4 (5.6–15.5) and 6.6 (4.1–10.2), respectively ($p < 0.001$). Median 1,25-dihydroxyvitamin D [1,25(OH)₂D] levels were 19.3 pg/ml (IQR, 13.0–23.7), 17.1 (10.7–21.5) and 11.6 (7.9–20.1), respectively ($p = 0.040$). Old age, male sex, presence of DM, low hemoglobin,