

control, sham-operated, Captopril, low dose TGP and high dose TGP respectively. The pressure-overload method was adopted by abdominal aorta ligation to induce the CHF. Furthermore, collagenfibers detected by picosirius red staining and expression of NF- κ B, TGF- β 1 by immunohistochemistry and observed under a polarized microscope and assessed by image-pro plus 6.0. Matrix metalloproteinase's (MMP)-2, -9 mRNA levels by reverse transcription PCR (RT-PCR), the concentration of angiotensin II was determined by radioimmunoassay and ELISA was employed to determine the cytokine IL-1 β . **Results:** It was observed that TGP could relieve myocardial remodeling in rats induced by abdominal aorta ligation and decrease the level of angiotensin II and I/III collagen ratio, pathogenic cytokines and inhibit the expression and activities of MMPs. **Conclusions:** Consequently, the observations suggested that myocardial remodeling was mediated by the NF- κ B pathway.

Alternative Medicine & Nutrition - Patient-Centered Research

PAM10 SIGNIFICANCE OF STOOL TESTS IN CHILDREN WITH COW'S MILK PROTEIN ALLERGY

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Objectives: The most common food allergy in children is cow's milk protein allergy (CMPA). The aim of this research is to observe gastrointestinal changes induced by this nutritional allergy and to monitor the effect of dairy elimination diet on these symptoms. **Methods:** Children with symptoms suggesting CMPA were included in this study (n=47). The investigation was performed at the Balassa János County Hospital in Szekszárd, Hungary. Stool samples were collected from the children at the time of the diagnosis, and after 3 months of elimination diet. During visits, a self-edited questionnaire was filled by the parents. Stool samples were evaluated using Bristol stool scale and Quantum Blue fecal calprotectin (FC) rapid test. **Results:** In the entire study population (n=47, mean age:7.36 years, 42.6 % female), no significant difference in FC values was observed before (mean: 73.98 μ g/g, SD: 71.12) and after (mean: 68.11 μ g/g, SD: 74.04) elimination diet (p=0.21). However, after dividing the participants into two subgroups according to the questionnaires, the following was observed: a significant decrease in FC values (p<0.001) was detected in children who strictly followed the diet (n=35) comparing the first (mean: 84.057 μ g/g, SD: 79.48) and the second (mean: 41.114 μ g/g, SD: 34.24) stool sample. Evaluating the results of Bristol stool scales before elimination diet, 36.2% of the study population presented with normal stool, 63.8% had stool abnormalities. After 3 months of elimination diet, the former results changed as the following: 93.6% showed normal stool, 6.4% still had constipation or diarrhea. **Conclusions:** According to our data, FC can be an objective parameter in monitoring of allergic colitis in children with CMPA. Significant improvement in symptoms can only be expected after a strict diet. Beneficial effects of elimination diet on the gastrointestinal symptoms can also be confirmed using the Bristol stool scale among children with CMPA.



PAM11 DEVELOPMENT AND EVALUATION OF THE BLOOD DEFICIENCY QUESTIONNAIRE (BDQ)

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Objectives: To develop and evaluate the blood deficiency questionnaire(BDQ) which provide an effective clinical efficacy evaluation tool for patient self-evaluation. **Methods:** The theoretical framework and initial BDQ were established by literature review and semi-structured interview. After a pilot study, the final BDQ with 3 domains including 'brain blood deficiency (BBQ)' 'heart blood deficiency (HBD)' and 'meridian, collateral body constituents blood deficiency (MCBD)' was developed. Confirmatory factor analysis (CFA) was used to evaluate the construct validity of BDQ. Discriminant validity was evaluated by T-test between two groups. Internal consistency reliability was assessed using Spearman correlation coefficients and Cronbach's α coefficients. Test-retested reliability was evaluated by Spearman correlation coefficients. **Results:** The scale consisted of 11 items which included 'dizziness' 'avoid thinking because dizzy' 'need a break because dizzy' 'forgetfulness' 'palpitation' 'dream more' 'bad complexion or yellowed' 'dazzling or dry eyes' 'dry skin' 'numbness of limb skin' and 'limb restraint', and the additional menstrual information. The results of T-Test were significant which the BDQ can distinguish normal people from patients. In CFA, items were divided into 3 factors (KMO=0.812, p<0.001). The Cronbach's α coefficient of total scores was 0.821, and the Spearman correlation Coefficients between items and total scores were good (0.420-0.766). The Spearman Correlation coefficients of test-retested reliability were significant (0.518 -1.0). **Conclusions:** In this study, 3 domains with 11 items and the additional



menstrual information in the BDQ were developed. The BDQ is a reliable and valid instrument for evaluating blood deficiency in the clinical.

Alternative Medicine & Nutrition - Real World Data & Information Systems

PAM12 ESTIMATING EXCESS HEALTHCARE COSTS OF MALNOURISHED PATIENTS IN A LEARNING COLLABORATIVE OF U.S. HOSPITALS

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Objectives: Malnutrition carries significant economic burden to the U.S. healthcare system. This study extrapolates excess costs using national cost estimates, associated with increased length of stay (LOS) and 30-day readmissions experienced by patients with a malnutrition diagnosis compared to non-malnourished patients in a real-world sample of 56 U.S. hospitals. **Methods:** We identified two cohorts of patients using ICD-10-CM codes: 421,125 patients and 296,023 patients, with a variable tag of LOS and 30-day readmission, respectively. Both cohorts included 26,428 patients with a medical diagnosis of malnutrition \geq 18 years-old upon admission. A 2016 national claims-based analysis by the Healthcare Cost and Utilization Project calculated costs for 1.45M inpatients with malnutrition in 2016, representing 5.27% of the 27.6 million total non-maternal and non-neonatal stays. To evaluate the total excess costs among malnourished patients to the healthcare system, we calculated excess cost per patient associated with increased LOS and 30-day readmissions (\$12,635 and \$3,700, respectively) and extrapolated that over the total patient cohorts. **Results:** Our analysis indicates that a medical malnutrition diagnosis amounts to excess costs of \$333.92M and \$16.86M, associated with increased LOS and readmission within 30 days of discharge, respectively. Our data shows 82.76% of malnourished patients were above the median LOS, compared to 47.79% of non-malnourished patients who were above the median LOS (p<0.0001). Average readmission rate among malnourished patients is 17.24%, compared to non-malnourished patients with an average readmission rate of 9.24%, (p<.0001). **Conclusions:** Our analysis using a first of its kind aggregate real-world dataset of patients identified with malnutrition supports previously reported claims data demonstrating the excess costs associated with malnutrition in hospitalized adults. These findings support the need for a call to policymakers to adopt policies incentivizing providers to focus on these patients. Identifying and treating malnutrition may provide substantial savings to the U.S. healthcare system.



Patient Behavior Studies

PB1 PATIENT-REPORTED CONCERN, UNDERSTANDING AND LIFESTYLE MANAGEMENT OF NON ALCOHOLIC STEATOHEPATITIS PATIENTS: A 12-COUNTRY REAL WORLD STUDY

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Objectives: There is currently a lack of real-world evidence regarding non-alcoholic steatohepatitis (NASH) patient perceptions and experience of their condition. This study investigated differences between patients with advanced fibrosis (AF-NASH; fibrosis stage 3-4) and early fibrosis (EF-NASH; fibrosis stage 0-2) regarding concerns about NASH, degree of knowledge, associated impact and motivation to change lifestyle. **Methods:** Data derived from cross-sectional 2018/19 Adelphi NASH Disease Specific Programme (France, Germany, Italy, Portugal, Spain, UK, US, Canada, Australia, Japan, Saudi Arabia, UAE). Physicians completed questionnaires describing 2-8 NASH patients. Fibrosis severity categorized using peer-reviewed, retrospectively-applied fibrosis scores (AF-NASH >12.1kPa or EF-NASH < 6.5kPa) based on vibration-controlled transient elastography results. Voluntary patient assessments measured impact of NASH on concerns, knowledge and lifestyle changes. All differences stated were significant (p \leq 0.05). **Results:** 734 NASH patients were included (77% AF-NASH vs. 23% EF-NASH). Mean age 55.3 years; mean BMI 32.7. AF-NASH patients reported more concerns about living with NASH (44%/35%), difficulties with liver (36%/18%) vs. EF-NASH patients. AF-NASH patients more frequently reported NASH affected family/social life (7%/1%), appearance/confidence (15%/8%), motivation (14%/5%) and feelings about future (18%/5%). 71% of patients received lifestyle advice. Despite physicians having suggested lifestyle interventions to AF-NASH patients for longer than EF-NASH patients (32/20 [months]), the former self-reported not receiving enough information vs EF-NASH patients (15%/5%). Physicians reported AF-NASH patients found it difficult to implement exercise advice vs EF-NASH patients (70%/81%). Fewer AF-NASH patients vs EF-NASH patients reported making a greater effort to improve health (13%/22%) and increase daily exercise (3%/9%). **Conclusions:** Whilst AF-NASH patients appear more concerned/impacted by NASH overall vs. EF-NASH patients, they do not appear to be motivated into making

