

regression analysis using SPSS/WIN 24.0. Results: Findings revealed that; 1) The degrees of suicidal ideation were significantly different among groups according to the marital status, drinking and smoking history. 2) Pearson's correlation coefficient revealed a significant association among the suicidal ideation, depression, social support and meaning in life. 3) Multiple regression analysis showed depression, social support and meaning in life were related to factors. Conclusion: Based on the findings of this study, health professionals should provide home based Korean old adult renal dialysis patients with proper management of suicidal ideation as well as its relating factors, depression, social support and meaning in life. Especially, it needs to implement suicidal ideation management and self-help group program to home based old adult renal dialysis patients.

#### BIOLOGICAL AGE INFLUENCES HEART FAILURE PATHOGENESIS

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Heart failure (HF) impacts patients of all ages and is an enormous public health problem. Historically, HF has been treated with a single, multi-purpose approach, despite the observation that biological differences such as age influence HF pathogenesis and therapeutic outcomes. We hypothesized that HF pathogenesis differs across the life-course, a hypothesis which we tested with a mouse model of cardiac dysfunction at three distinct stages of life. C57BL/6 mice at pediatric (5 weeks), adult (3-5 months), and old (18 months) ages were treated with a mini-osmotic pump that eluted isoproterenol (ISO; 30mg/kg/hour) for six days. As expected, cardiovascular morbidity and mortality were significantly worse in the old group. Both pediatric and adult underwent hypertrophic remodeling, as evident by higher LV weight relative to tibia length (TL). However, ISO exposure did not increase LV/TL in old mice. We performed RNA-sequencing to understand pathways and genes differentially regulated by age. 119, 1515, and 33 genes were significantly differentially expressed in pediatric, adult, and old mice exposed to ISO, respectively. Of these, only 2 transcripts were upregulated in response to ISO across all three ages. Expression of pro-fibrotic mediators differed across the life-course, with adults inducing a pro-fibrotic transcriptional program ( $\alpha$ -smooth muscle actin, fibronectin, collagen, periostin) that was attenuated in old and absent in pediatric animals. Our data clearly demonstrates that pediatric, adult, and aged hearts activate distinct molecular remodeling in response to ISO, highlighting the significance of age as a biological variable in HF pathogenesis.

#### SOCIAL NETWORK INFLUENCES ON SENSE OF CONTROL AND ATTRIBUTED DIGNITY IN OLDER AGE: RESEARCH RESULTS

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The purpose of this study was to explore the relationship between the functions of individual social networks, defined here as social support, and the outcomes of sense of control and attributed dignity among a sample of older people living with multiple chronic conditions. This study integrated an explanatory sequential (Quan/Qual) mixed methods design. Descriptive statistics were used to describe social networks. Bivariate correlations and regression statistics were used to examine the relationships of social network support (MOS-Social Support Scale) with the dependent variables of sense of control (Wallhagen Revised PCQ Questionnaire) and attributed dignity (Jacelon Attributed Dignity Scale). Open-ended interviews and thematic analysis were used to expand understanding of the quantitative findings. A cross-sectional sample of eighty-nine community dwelling older people living with multiple chronic health conditions participated. Social support, as a function of one's social network, predicted the outcome of sense of control ( $\beta = .33$ ,  $p \leq .01$ ) and attributed dignity ( $\beta = .44$ ,  $p \leq .001$ ). Correlation statistics and regression models substantiated positive relationships of social supports' influence on perceived sense of control and attributed dignity. Thematic analysis, based on open-ended interviews (n=12), expanded on the nuances of social influences on sense of control and attributed dignity in managing chronic health conditions through the themes "learning to ask for help", "only a phone call away" and "smaller circles". This research proposes new ways of understanding the relationships between perceptions of social support, sense of control and attributed dignity in later life in managing health.

#### AGING ALTERS STEROID HORMONE METABOLISM AND EXACERBATES LOWER URINARY TRACT DYSFUNCTION IN MICE

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Benign prostatic hyperplasia (BPH) is a disease of aging that impacts 50% of men in their 50s and 90% of men in their 80s. While rodent models have been invaluable in the study of lower urinary tract dysfunction (LUTD) associated with human disease, many studies recapitulate aspects of aging, steroid hormone fluctuations, and/or inflammation without using aged mice that would better correspond to the age range of patients. In this study, we examine the impact of age in the hormone-induced mouse model of LUTD, so we can better understand the contribution of age to disease initiation and progression. We've discovered that aged mice exhibit a level of LUTD that is further exacerbated by hormone implantation when compared to both treated and untreated younger mice. Examination of circulating levels of androgens and estrogens indicate an alteration in steroid hormone metabolism with age, suggesting an altered nuclear receptor activation within disease. Epigenetic modifications have been associated with normal aging, including an increase in DNA methylation to alter gene expression. Examination of the proximal promoter of a steroid enzyme gene, CYP7B1, responsible for the degradation of  $3\beta$ -diol (an ER $\beta$  ligand) within the prostate shows an age-mediated increase in methylation. With this, there is a corresponding decrease in CYP7B1 gene expression in the aged mice. Taken together, this suggests the altered steroid hormone environment seen