

## BEHAVIORAL MODELING TO GUIDE PATIENT'S ADHERENCE TO FLUID CONTROL Sana Ghaddar, Wael Shamseddine, Hafez Elzein. American University of Beirut, Beirut – Lebanon

We used the Health Behavioral Model (HBM) and the Transtheoretical Model (TTM) to assess patients' readiness to comply with recommended fluid and sodium intake.

This was a cross sectional study that examined 172 eligible hemodialysis (HD) patients dialyzing at 3 HD units in Lebanon. The TTM questionnaire was used to place patients into stages based on their compliance with fluid restriction instructions and the levels of intradialytic water gain (IDWG) they exhibited in the last 4 weeks. The HBM questionnaire was used to assess patients' perceptions of the barriers, benefits, seriousness, susceptibility, and self efficacy in readiness to change their behavior. Univariate analyses were conducted to summarize the demographic, clinical and behavioral characteristics of study participants. Multivariate statistics (ANOVA, MANOVA, and post hoc LSD analysis) were used to examine the interface between constructs of HBM with TTM stages of change.

The study sample included 93 (53.8%) males, average age was  $57.8 \pm 14.0$  (range: 23-86) and average dialysis years were  $4.6 \pm 4.9$  (range: 0-32). The distribution of participants across the TTM stages was: 18.5% in the precontemplation, 40% in the contemplation, 38.1% in the preparation, and 3.4% in the action/maintenance stage. The HBM constructs were overall significantly associated with the TTM stages as demonstrated by MANOVA ( $p < .01$ ). Significant differences across TTM stages were found on the perception of benefits ( $p = .04$ ) and self-efficacy ( $p < .01$ ). Patients in the precontemplation stage had significantly lower scores on perception of benefits compared to those in action/maintenance stage ( $p = .01$ ), and on the perception of self-efficacy compared to those in the contemplation, preparation, and action/maintenance stages ( $p < .01$ ).

Educational programs for patients should focus on increasing patient's perception of the benefits (reduced complications and need for medication) and barriers (difficulty of adherence to recommended diet or economic barriers to obtain or prepare food items) to induce patient's behavioural movement into the higher TTM stages.