

Non-Adherence to Hemodialysis among Patients- Causes and Consequences

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Objective

Dialysis non-adherence among Saudi hemodialysis (HD) patients has not been studied previously. We study its prevalence, causes and consequences of non-adherence.

Methods & Materials

All chronic HD patients in our center were studied. Their demographics as well as Hb, Kt/v, K, and phosphate, dialysis type, dialysis vintage, duration and shift were recorded. Non-adherence, defined as missed dialysis session or patient –derived shortening of the dialysis session by > 10 minutes over a month's period were recorded/ We analyzed the relationship of on-adherence to hospitalizations, interdialytic weight gain , intradialytic symptoms., home to hospital distance and smoking habits

Results

265 patients were included; mean age was 61.8± 18.2 years, 47.3% were male, dialysis vintage was 3.8± 3.3 years, and 65.9% were on HD and 34.1 % on hemodiafiltration (HDF)

During the study period, the non-adherence rate was 25% for missed dialysis session and 72% for shortened dialysis for at least on one occasion.

No adherence was more likely to occur in males than females (75% and 66% respectively (p= 0.05), in smokers (57.1 % versus 21.7% (p=0.0003) and in night shifts rather than day shifts (33.6% versus 20.6 % (p=0.042)

Non adherent patients had lower Kt/V than adherent patients (1.22± 0.2 and 1.31± 0.2 respectively (p=0.01), higher mean intradialytic weight gain weight gain (2.7 ±1.0 and 2.4± 1.0 Kgs respectively (p=0.02) and are more likely to be hospitalized (50% versus 32% (p= 0.01)

On the other hand, no difference between non adherent and adherent were observed in serum P, K or hemoglobin levels or intradialytic symptoms, education, employment, in the distance between the dialysis unit and home, type of dialysis, Charlson comorbidity index or the dialysis vintage.

Table 1 comparing the adherent group to the non adherent group

Conclusion

Non adherence in our group was comparable to other reports and is more likely to occur in male patients, smokers and in night shifts. It is associated with lower dialysis adequacy, higher mean intradialytic weight gain weight and higher hospitalization rate.