



The purpose of this research is to show the demographic structure of the hemodialysis center in Konjic, and also demonstrate the impact of vascular access to the adequacy and the outcome of dialysis treatment” Mutevelic et al (2015).

Reference:

Mutevelic, A., Spanja, I., Sultic-Lavic, I. and Koric, A. (2015) The impact of Vascular Access on the Adequacy of Dialysis and the Outcome of the Dialysis Treatment: One Center Experience. *Materia Socio-Medica*. 27(2), p.114-7.

The impact of vascular access on dialysis outcomes [@ivteam #ivteam](http://ctt.ec/oWaQI+)

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Abstract:

**INTRODUCTION:** Chronic kidney disease (CKD) is a gradually reduction in glomerular filtration rate (GFR) caused by destruction of a large number of nephrons. Kidney failure is the final stage of CKD with GFR <15ml/min/1.73m(2) or requiring dialysis. Patients must provide vascular access, which is also the “life line” and “Achilles heel” of hemodialysis treatment. **AIM:** The purpose of this research is to show the demographic structure of the hemodialysis center in Konjic, and also demonstrate the impact of vascular access to the adequacy and the outcome of dialysis treatment. **METHODS:** This cross-sectional study included 36 patients on hemodialysis in Center in Konjic from September 2010 to December 2014. The method of collecting data is performed through medical records and the quality of dialysis is taken to be

Kt/V > 1.2. Statistical analysis was performed using SPSS software and Student T-test.

**RESULTS:** The mortality of patients treated by dialysis is 37.8%. The ratio of male and female patients is 55.6% vs. 44.5%, with an average age of  $52.91 \pm 14.36$  years and an average duration of hemodialysis of five years. The highest percentage of patients dialyzed through arterio-venous fistula (AVF) on the forearm (72.2%). In that patients the most common complication is thrombosis with 30.5%, which require recanalization in 11% and replacement in 19.5% of patients. Of the other dialysis patients, 16.7% of patients are dialyzed via a temporary and 11.1% via a permanent catheter (the most common complication in that patients is infection in 83.3% cases) in v.subclavia. Although the AVF is more frequently, experience shows frequent implantation of a permanent catheter in elderly patients due to the less quality of their blood vessels. Although the Kt/V by patients who are dialyzed through temporary catheter is less than 1.2 and by the other two access is greater than 1.2, our results confirm that vascular access does not have an influence on quality of dialysis. Average Kt/V shows that the adequate dialysis dose is delivered in this Center, which means that despite the impact of vascular access in HD quality, other factors also can affect on dialysis treatment, which was noticed by patients and staff.

**CONCLUSION:** Despite the largest mortality rate in patients with a permanent catheter and least in patients with AVF, the type of vascular access does not affect the outcome of dialysis treatment.

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