Reaching Consensus on Outcomes for Successful Cannulation of the Arteriovenous Fistula: Patient and Healthcare Provider Perspectives

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Problem/Purpose: There is a lack of consensus on what outcomes constitute arteriovenous fistula (AVF) cannulation success. The purpose of this study was to understand what successful cannulation of the AVF means to the patient on hemodialysis (HD) and to health care providers working with this patient population.

Sample: A purposeful sample of 17 patients from one hemodialysis program participated. Patients were eligible to participate if they were > 18 years of age, used an AVF for dialysis, and had the HD staff perform the cannulation. The views of physician and nursing experts in vascular access were also elicited.

Methods: This was a mixed method descriptive study. Qualitative methodology was used to explore the patient experience around successful cannulation through participation in a one-to-one interview. Content analysis was used to identify a number of themes. Quantitative methodology was used to elicit data from healthcare providers by way of a one-time online survey.

Results: Preliminary review of patient interviews would suggest that pain during cannulation is the number one concern and this has a significant negative impact on the patient experience. A positive nurse-patient relationship was beneficial to their coping ability. Strategies that distract patients from the cannulation procedure were also found to be helpful. Survey results from healthcare providers are not yet available.

Conclusions/Nursing Implications: Results of this study are essential prior to any intervention studies specific to cannulation and results will have broad applicability across HD settings. Results will be highly useful to nephrology nurse educators who teach and evaluate nurses’ cannulation skills. Efforts to improve nurses’ cannulation skills and reduce complications associated with failed cannulation will lead to better patient outcomes.

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