

ORIGINAL ARTICLE

Patient Education

Enhancing Knowledge in Adolescents Undergoing Hemodialysis in Palestine: The Impact of a Video-Assisted Educational Program

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Received: 31 March 2025 | **Revised:** 22 July 2025 | **Accepted:** 25 July 2025

Funding: The authors received no specific funding for this work.

Keywords: adolescent | educational program | hemodialysis | knowledge | video assisted

ABSTRACT

Background: Hemodialysis is a common initial treatment for young individuals with end-stage renal disease. Educating these patients is crucial for improving their knowledge and well-being. Lifestyle modifications, promoted through health education, are essential for reducing hemodialysis-related complications. Although traditional face-to-face education is prevalent, video-based education offers a more convenient and cost-effective alternative with numerous benefits.

Objective: This study aimed to evaluate the impact of a video-assisted educational program on the knowledge of adolescents undergoing hemodialysis in Palestine.

Methods: We conducted a quasi-experimental, pretest-posttest intervention study with 68 adolescent patients (Aged 13–18) diagnosed with end-stage kidney disease (ESKD). Patients were divided into two groups based on their treating hospital: an experimental group ($n = 34$) received video-based education, whereas a control group ($n = 34$) received traditional face-to-face education. Knowledge in both groups was assessed using the validated Kidney Knowledge Questionnaire.

Results: A Generalized Estimating Equation analysis revealed a statistically significant difference in knowledge scores between the experimental and control groups across pretest, posttest, and follow-up assessments ($p = 0.024$). Furthermore, within both the experimental and control groups, there were statistically significant improvements in total knowledge scores from pretest to posttest and follow-up assessments ($p < 0.001$).

Conclusion: Implementing effective educational interventions can enhance the knowledge of individuals undergoing hemodialysis. Therefore, we recommend using video-based instruction as a practical, easy, and engaging approach for educating hemodialysis patients.

1 | Introduction

End stage kidney disease (ESKD) has become one of the leading reasons for mortality in the world. Renal failure causes many health problems such as cardiovascular disease and hypertension [1]. ESKD is defined as a complete loss of kidney

function and is diagnosed by several laboratory tests, biopsy histopathology tests, and imaging diagnostic procedures [2]. ESKD is a condition of health problems that require long-term health care and costly care [3]. According to the Palestinian Ministry of Health, the number of patients with ESKD who require dialysis is growing [4]. In the West Bank/Palestine,