

# Video Education Increases Patient Knowledge About Phosphorus Control and is a Preferred Form of Education

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#### Introduction

Nephrology care teams have attempted to achieve optimal phosphorus levels in patients through many methods of patient education and clinical interventions. The value of video education in the dialysis setting is unclear.

## Objective

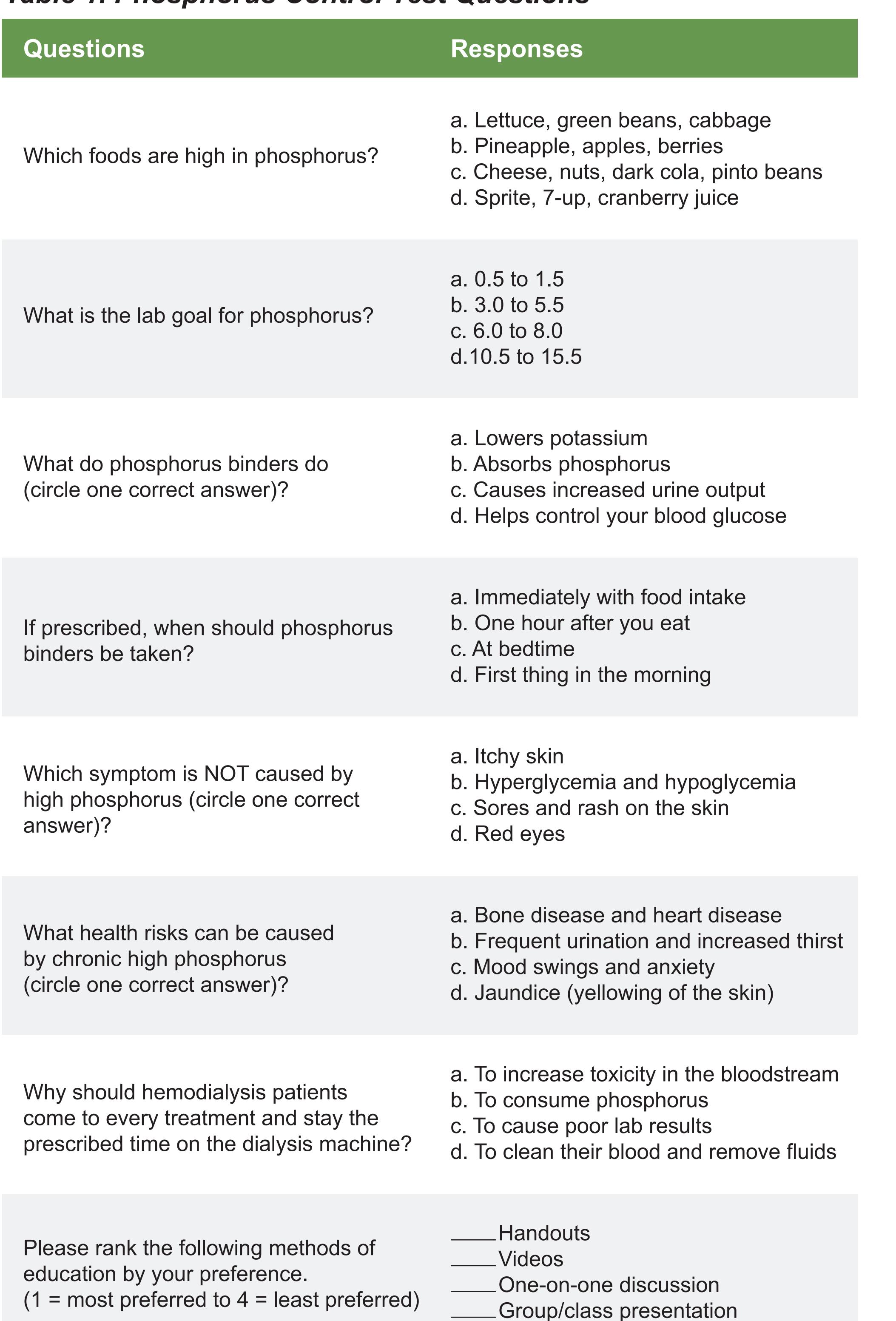
We assessed the acceptance of a video education program designed to inform hemodialysis patients about controlling their serum phosphorus levels and other dialysis-related topics.

#### Methods

- Thirty-nine centers in one division of a large dialysis organization (LDO) participated in an assessment of a video education project.
- The centers were randomly assigned as part of a larger assessment of the efficacy of the video education at improving the percent of patients with phosphorous levels within recommended range (≤ 5.5 mg/dL).
- These centers were allocated in a 1:1 ratio to receive the video education program in April and May 2011 or at the end of the year in 2011.
- The centers (n = 20) allocated to receive the training first were to be compared to the centers (n = 19) who had not yet received the education program.
- Centers were stratified by size (< 30, 30-49, 50-69, 70-99, 100+) and then randomly allocated within strata to early or late 2011 education. A random number generator and sorting algorithm was employed in SAS 9.2.
- Patients completed questionnaires about their knowledge of phosphorus control and preferences regarding types of education (handout, video, one-on-one counseling, and group presentations) before and after the initiative (Table 1).
- The video program consisted of 6 videos shown at 1-week intervals and covering the following topics:
- understanding kidney function and kidney disease treatment options,
- mineral and bone disorders,
- benefits of fistula use over catheter use,
- success stories (highlights of patients leading successful and happy lives while on dialysis), and
- 2 videos on cooking and making dialysis-friendly meals.

#### Results

#### Table 1. Phosphorus Control Test Questions



# Figure 1. Questions Answered Correctly on the Pre- and Post-Test

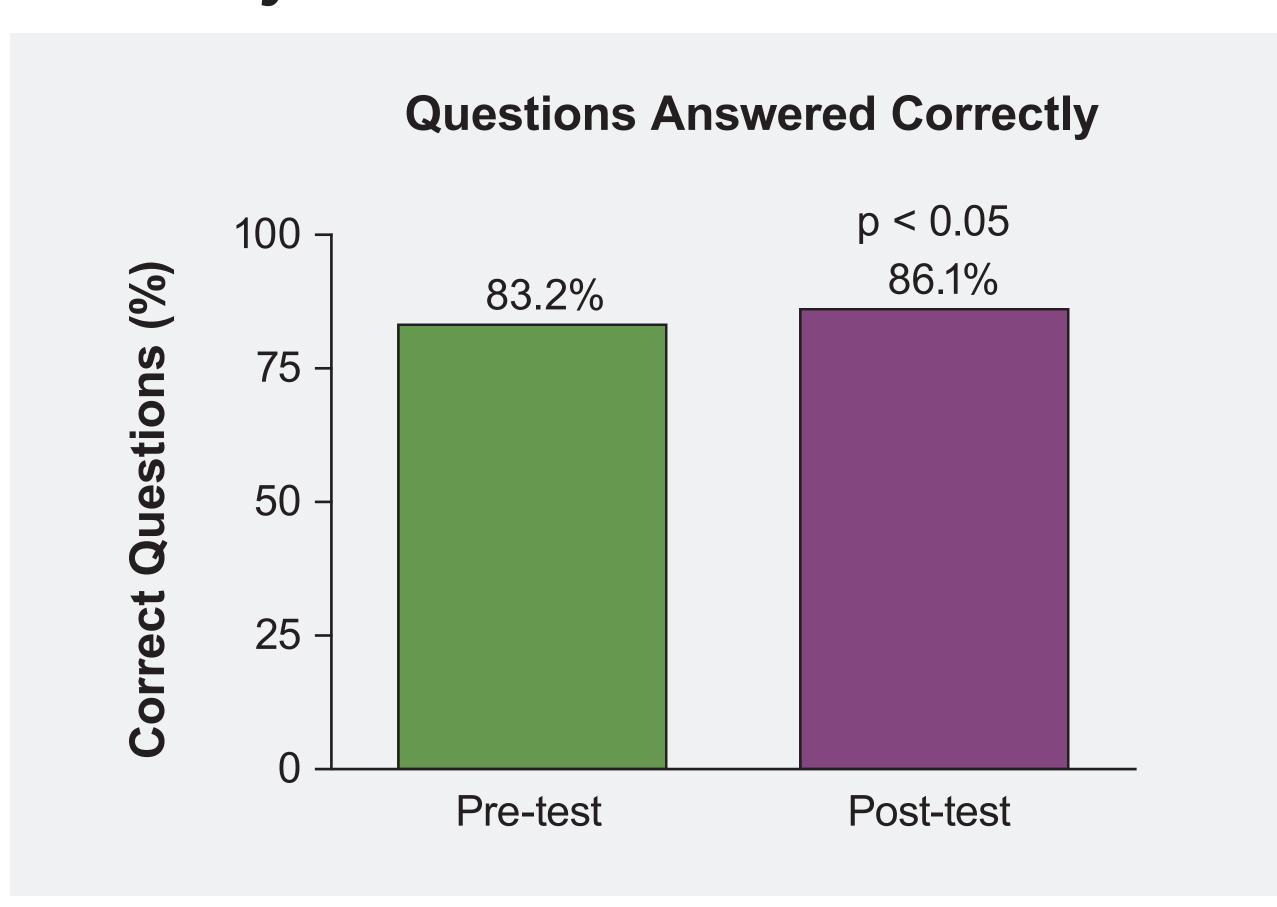


Figure 2. Video Ranked as Most Preferred Method of Education by Patients

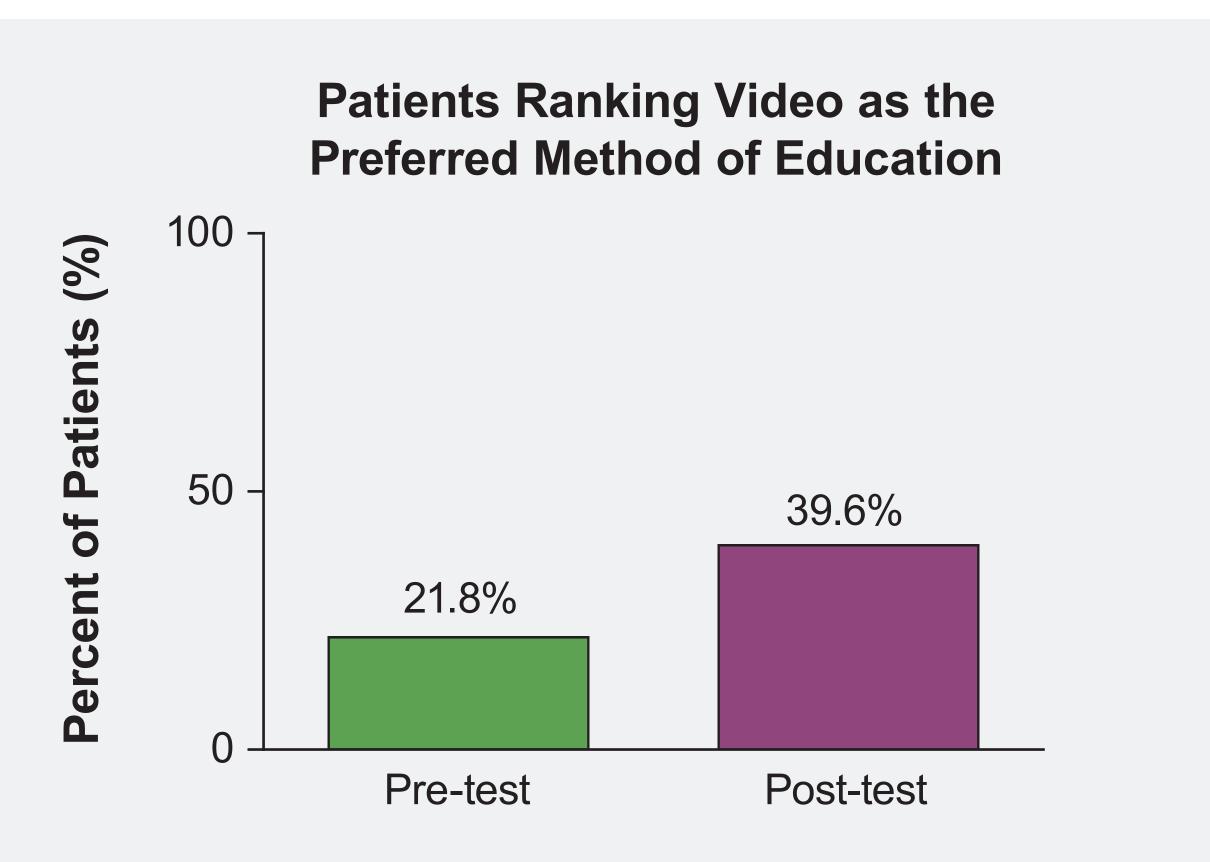
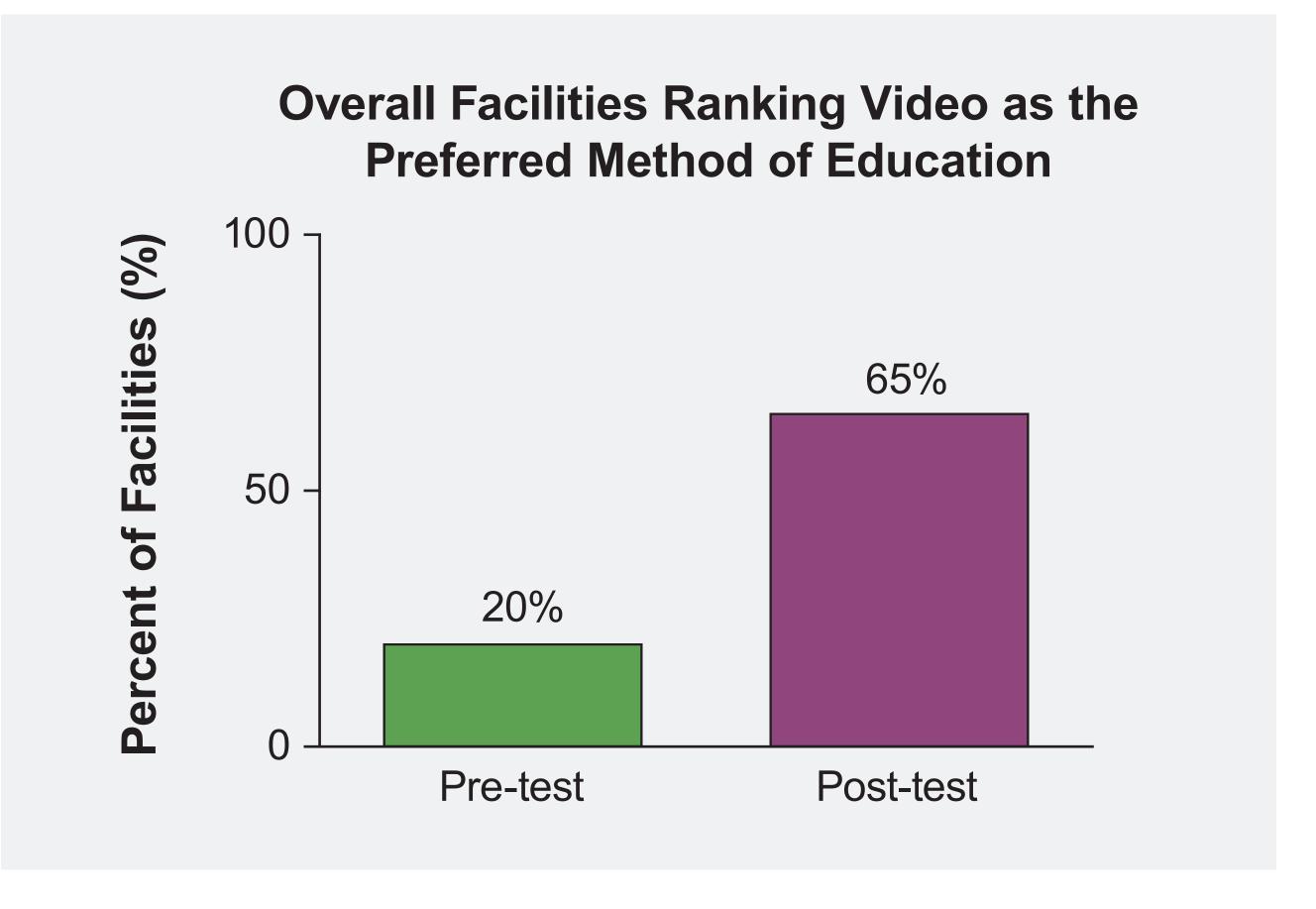


Figure 3. Video Ranked as Most Preferred Method of Education at a Facility-Level



The 771 patients who completed both the pre- and post-test scored significantly better (p < 0.05) on 5 of 7 knowledge components after the 6-part program than they had beforehand</li>

(Figure 1).

- The percentage of patients who said video education was their most preferred method rose from 21.8% to 39.6% (Figure 2).
- Of the 936 patients
   who took the post program test, 86%
   said the program
   improved their overall
   understanding of
   dialysis and 83% said
   they would like to see
   more video education
   in the future.
- The percentage of centers that ranked video education as the most preferred format overall rose from 20% to 65% (Figure 3).

#### Conclusions

- The majority of participating patients felt the program improved their overall understanding of dialysis.
- In general, patients had a very positive response to video education, with 44% of patients ranking it higher as a preferred method of education on the post-test compared to the pre-test and only 23% ranking video education as a less preferred method of education on the post-test compared to the pre-test.
- The percentage of patients ranking video education as the most preferred method nearly doubled after the 6-week program.
- Most participating patients would like to see more video education in the future.
- The 6-week video education program:
- improved patient knowledge of dialysis and
- was a well-accepted method of patient education.

### Acknowledgments

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