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**Patient Experience with an Interactive Web-Based Phosphorus Education Tool**

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On-line education tools are becoming increasingly popular yet the level of patient participation and the utility of these tools is unclear. The 30-day Phosphorus Challenge, a web-based tool open to the general public, is designed to educate kidney patients, family members, caregivers, and health care teams through phosphorus-related emails, games, educational content (articles, recipes, handouts, videos) and community board-based social interaction. We evaluated the effectiveness of this interactive tool in increasing phosphorus knowledge and improving phosphorus control in dialysis patients.

Forty-three dialysis patients from 22 dialysis centers geographically spread across the US, enrolled in the Phosphorus Challenge Evaluation and 24 (56%) completed the pre and post tests and had phosphorus lab values available for each time point. On a test of 6 knowledge questions, these 24 patients got an average of 0.8 more questions right after the intervention: 14 patients improved their scores while only 2 declined. The mean phosphorus level change of -0.20 was not statistically significant in a paired t-test (p=0.44, 95% CI: -0.72, 0.32). Twelve patients experienced declines in phosphorus levels, while 11 experienced an increase, and 1 was unchanged.

	<b>Mean Questions Answered Correctly</b>	<b>Phosphorus (mg/dL) mean ± SD</b>
<b>Pre-challenge</b>	4.2	5.93 ± 1.39
<b>Post-challenge</b>	5.0	5.73 ± 1.51

In the post survey, over 75% felt they learned something about phosphorus and greater than 90% felt more confident about making lower phosphorus food choices after taking the challenge.

The Phosphorus Challenge had a positive impact on phosphorus levels and knowledge for approximately half of those who completed it, suggesting the Phosphorus Challenge offers a unique interactive approach to patient education that is readily available for patients and caregivers who have internet access.

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