

Benefit of Using Visual Teaching Tools for Phosphorus Control in a Hemodialysis Unit

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BACKGROUND

Renal dialysis patients need continuous education related to their clinical care and well being. It is important to present the same educational topics in different formats with different tools to keep the patients motivated.

A Californian hemodialysis unit was experiencing difficulty managing serum phosphorus levels. The DaVita® Registered Dietitian (RD) assessed the patients and found that an average of 30% were illiterate and 30% only spoke Spanish.

As a result, the center's RD developed a new visual teaching tool/game called "Phosphorus Island" with the goal of improving the patients' phosphorus levels.

We thank the patients who participated in this study and DaVita Clinical Research® for support in preparing this poster. DCR is committed to advancing the knowledge and practice of kidney care.

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METHODOLOGY

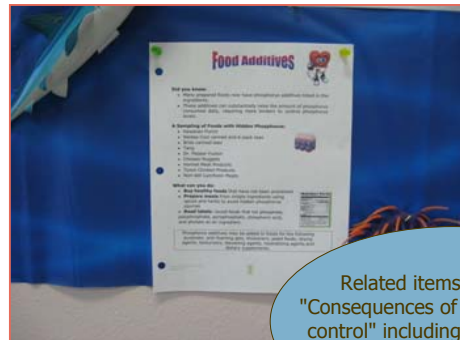
In January 2008, Phosphorus Island was constructed on the Selma Dialysis unit's lobby wall.



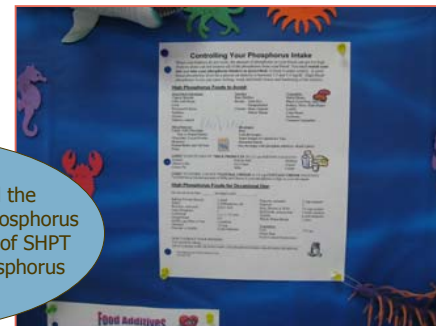
Phosphorus Island had 3 levels

- Paradise for serum P ≤ 3.5
- Green Grass for serum P ≤ 4.5
- Brown sand for serum P ≤ 5.5

The ocean surrounding the island included 3D snakes and sharks for serum P > 6.5 , 7.5, and 9.5.

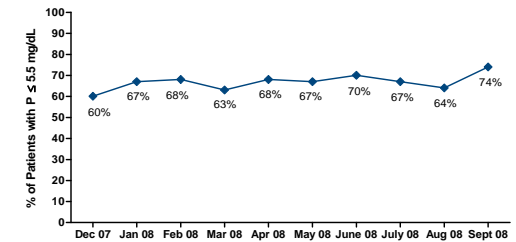


Related items showed the "Consequences of Poor Phosphorus control" including causes of SHPT and pictures of high phosphorus foods with red X.



RESULTS

- 83 patients in the study; 9 month education period
- Decrease from 10% to 6% of patients with phosphorus levels ≥ 8.0
- Improvement from 60% to 74% of patients with phosphorus levels at ≤ 5.5



CONCLUSION

- Visually reminding patients if they were "safe" ($P \leq 5.5$) or "drowning" ($P > 5.5$) has greatly improved serum phosphorus levels in our hemodialysis unit despite lack of language skills or literacy.
- Improving serum phosphorus levels in new, fun, visual way has decreased the risk of calcification in this hemodialysis population and decreased the patients' risk of mortality.

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