Collaboration Yields Evidence-Based and Stakeholder-Reviewed Online Nutrition Content for Patient Activated Learning System

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Background

- Novel approaches are needed to deliver relevant, trusted healthy eating supports to populations experiencing health disparities.

- The Patient Activated Learning System (PALS) is a publicly available web-based resource designed to provide engaging, easily understood, and well-researched information for people who want to know more about health and disease management.

- On PALS, evidence-based information is presented in single-objective webpages.

Objectives

- Develop evidence-based PALS webpages about relevant nutrition and cardiovascular disease (CVD) topics.

- Evaluate acceptability of the PALS nutrition webpages using interviews with Expanded Food and Nutrition Education Program (EFNEP) educators and participants.

Methods

- Pilot study conducted between 2019-2021

- Multidisciplinary partnership: Cornell University Division of Nutritional Science, Cornell Cooperative Extension and New York State EFNEP, Weill Cornell General Internal Medicine, PALS

Process and Results

Conducted online surveys with EFNEP educators to determine nutrition topics

Survey 1: Purposive sample (n=12)
- Submitted common nutrition questions about CVD
- Questions grouped thematically, condensed, and included in Survey 2

Survey 2: Convenience sample (n=45)
- Rated questions on perceived relevance

- Identified **33 common high priority CVD-related nutrition questions**

- Highest ranked questions informed topics for **4 new PALS nutrition webpages**
  1) Coconut oil and heart health
  2) Saturated and unsaturated fat
  3) Dietary fiber and heart health
  4) Soluble and insoluble fiber

Developed 4 PALS nutrition webpages

Built a rapid systematic review process integrating evidence from nutrition research and practice guidelines to inform page content

For each PALS webpage developed an:
- **Evidence Review Summary** for professionals
- **Public-facing content** at the 6-8 grade reading level

Manualized the evidence review process

Assessed webpage acceptability for EFNEP audience with EFNEP educators

- Conducted 6 virtual semi-structured focus groups (n=10)
- 2 researchers iteratively coded focus group transcripts, independently summarized feedback, and discussed findings.

- Pages contain clear, concise information
- Content acceptable for educators and participants
- Combination of text and figures helpful for range of learning needs
- Appreciated behaviorally-focused content in particular

Assessed page acceptability with EFNEP participants

- Conducted virtual semi-structured individual interviews (n=12)
- Solicited feedback about page content clarity, appeal, helpfulness
- 3 researchers iteratively coded interview transcripts, independently summarized feedback, and discussed findings

- Pages offer relevant, easily digestible content
- Identified appealing aspects, e.g., practical information in colorful figures
- Demonstrated understanding of content
- Most found content helpful and would return to PALS, citing clarity of information and perceived trustworthiness of source

PALS Nutrition Webpage

www.palsforhealth.com

- Page Title/question
- Link to Evidence Review Summary
- Author information
- Answer text
- "Sticky sound bite" Takeaway Message
- Summary Figure
- Self-Assessment Question

Conclusions & Implications

- Collaborative effort by Cornell Division of Nutritional Sciences and Weill Cornell PALS team led to creating a strong pipeline to produce nutrition-related PALS content.

- Engaging EFNEP educators and participants in development and review helped generate relevant, useful, clear and appealing content that these stakeholders found trustworthy.

- The PALS nutrition content development process is a replicable method to produce acceptable evidence-based nutrition information for underserved populations.

- Lessons learned may apply to other eHealth platforms.