

1-18-2019

Creation of a Diabetic Health Literacy Program

Cathy Jo Jones
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/symposium2019>

Recommended Citation

Jones, Cathy Jo, "Creation of a Diabetic Health Literacy Program" (2019). *2019 Program & Posters*. 21.
<https://scholarworks.waldenu.edu/symposium2019/21>

This Book is brought to you for free and open access by the Research Symposium at ScholarWorks. It has been accepted for inclusion in 2019 Program & Posters by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Creation of a Diabetic Health Literacy Program

Cathy Jo Jones, DNP, RN, CNE, Doctorate of Nursing Practice

Problem

Low health literacy (HL) plagues much of the world population. **High adult diabetic levels** on the eastern shore of Maryland (MD) that continue to worsen. This program sought to fill gaps between patients with low HL and diabetic information provided to them by the staff of a rural federally qualified healthcare center.

Purpose

Purpose question: **“What improvements will be made to patient care if staff can communicate to adult diabetic patients using appropriate HL sensitive methods?”** Used to guide the design of a staff development project for a rural federally qualified healthcare center (FQHC) in MD. The initiative sought to provide redefined HL sensitive information aimed at improving diabetic self-care.

Significance

This project highlights informational deficits of the following stakeholders:

- Care Provider team at the FQHC.
- Rural five county residents of the eastern shore of Maryland.
- Acute care rural hospitals.

Implications for future use:

- Expansion to other rural areas.
- Expansion to include other chronic disease processes.
- Expansion to other primary care and specialty centers.
- Expansion to other rural acute care facilities.

Social Change Implications

Rural healthcare lacks resources, specialty care providers, and lower compliance with treatment regimes. The study population is diverse with respect to educational levels, income levels, language, and location and transportation deficits. This program creates a method for opening the door to HL appropriate measures. By starting with the adult diabetic patient, and expansion into other chronic disease processes, much can change. Providing care to **ALL** rural patients in easily understood ways, will surely decrease disease progression and enhance overall chronic disease management of population health.

Theory or Framework

An excellent fit for this project was the **Health Literate Care Model**, which is based off of the **Chronic Care Model**. Developed by the United States Department of Health and Human Services, the model was created as a universal precautions approach to infuse HL principles throughout the entire patient care continuum.

Relevant Scholarship

Ferguson et al (2015), showed that 61% of the population scored at a sixth grade literacy level, and 57% at a seventh to 8th grade level. All exhibited low HL that was linked to poor diabetic self management. Sand-Jecklin, Daniels and Lucke-Wold (2016) found that patients with demonstrated low HL had higher hospital readmissions and emergency room visits. The rural study area has a high amount of limited English proficiency residents, that have great difficulty understanding English based information. Problems also significant to the area are limited primary and specialty care providers, long distances to travel for care, limited financial resources, and the lack of transportation (MD Healthcare Commission Rural Health Delivery Workgroup, 2017). The American Diabetes Association (2017) recommends that hemoglobin A1C (HgbA1C) levels within diabetics should be maintained at less than 7%. A prior small-scale study at the FQHC found that prior educational initiatives by staff did not improve, if at all the diabetic management of their patients. This indicated the need for creation of a change agent.

Research Question

“Will patient care levels of the adult diabetic FQHC patient change after staff has attended the Diabetic Health Literacy 101 in-service?” Entire project was designed to assist staff with their understanding of and purveyance of information to the adult diabetic patient in ways that would improve patient care.

Participants

Participants of this project included care providers (doctors, physician assistants, nurse practitioners, registered nurses, medical assistants, interpreters, and office staff) of one single clinical site of the FQHC. Standard IRB approval was garnered, and no direct patient interactions by this researcher were performed during this project.

Procedures

- Mixed Method Research Design.
- Evaluation of prior small-scale research study which reviewed 813 patient charts of adult diabetic patients split into those with educational interventions and those without (Jones, 2017).
- Randomized with 70 patients who had interventions, and 70 without proved basis for need.
- Consultation with FQHC's administrators and care provider team to determine needs.
- Researched best practices in diabetic chronic disease management & HL practices.
- Created new HL succinct handouts in both English and Spanish.
- Created anonymous HL pre-intervention survey via Survey Monkey.
- Designed lunch-n-learn in-service to discuss the universal precautions approach to HL communication to staff.
- Delivered sessions to staff over four separate times on two separate days.
- Disseminated handout packets to staff for use in patient care.
- Day one 5 item Likert scale anonymous post-intervention survey.
- Final one-month anonymous post-intervention survey.

Analysis

- Pre-survey – 85.7% response rate with 75% of care team responding indicating most already felt their understanding of HL/diabetic care was sufficient.
- Day one post-session survey – 54.5% staff felt knowledgeable about HL and either fully understood or recognized what was needed for HL improvement.
- One month post-session survey – only one respondent that did not utilize the tools provided in patient care.

Findings

- Staff would benefit from further integration of HL methods.
- Continued use of the screening tools and reevaluation would be beneficial.
- Many staff are reluctant to change current methods due to time constraints to screen and educate patients.

Interpretation

Creation of this in-service effort allowed staff to begin to think about HL and improved patient communication methods. Staff now has a tool to screen for HL at every new patient visit and on an on-going basis. Newly created English and Spanish diabetic information packets offer care providers evidence based and meaningful tools to utilize for adult diabetic patients. Increasing HL methods offers a huge opportunity for expansion to include other chronic disease processes.

Limitations

- Small sample size.
- Tight timeline did not allow for re-evaluation at four and six months post-intervention.
- HgbA1C level follow-ups would need to be followed-up at a minimum of three to six months for full correlation – timeline did not allow for this to occur.
- Brief amount of time (1/2 hour) allotted during lunch for in-service limited depth of information to be shared – no release time was allowed during patient care times.
- Dissemination of information contained on handouts into languages other than English or Spanish is problematic for small numbers of clients.

Recommendations

- Further infusion of HL efforts within the study clinical site.
- Continuation of HL initiatives and expansion to the FQHC additional six clinical locations.
- Championing HL initiatives on a volunteer basis to ensure proliferation of methods and aid to the community.
- Future expansion of diabetic HL initiatives to include other chronic disease processes.

Acknowledgements

Dr. Robert L. McWhirt, Committee Chairperson
Dr. O. Danny Lee, Committee Member
Dr. E. Stoerm Anderson, University Reviewer
Susan M. Johnson, MPH, RN, Preceptor