Opportunities for Healthy Behaviors: Do They Get Better with Age?

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Introduction

Diabetes is on the rise, with 1.9 million new diagnosed cases in people 20 years and older in 2010. Of all the age groups, diabetes is most prevalent in people aged 65 years or older (26.9%).[1] This same age group is also expanding and is expected to increase 73% by 2025.[2]

Researchers have found that increased insulin resistance and impaired insulin secretion are a few of the many reasons that older adults are more susceptible to acquiring diabetes.[3] Naturally, much concern revolves around this growing epidemic. Management of diabetes involves much self-care, including a healthy diet and adequate exercise. However, older adults have difficulty achieving these behavioral goals.

In this study, the aim to determine how opportunities for healthy behaviors are correlated with health status, diabetes, and age.

Results

Key Terms

No Barriers: Illness gets in the way of being physically active or cooking my own meals.
Convenience: I can afford to join a gym or buy fresh fruit.
Time: I have time to prepare my own meals.
Support: There are people I live with who eat healthy foods.
Physical Function: I am sometimes limited in climbing several flights of stairs.
Role-Physical: I accomplished less than I would've as a result of my physical health.
Body Pain: Pain interfered with my work.
General Health: In general, I would say my health is very good.
Vitality: I have a lot of energy.
Role-Emotion: I accomplished less than I would've because of emotional problems.
Social Function: My physical health interfered with my social activities.
Mental Health: I have felt calm and peaceful.

Methods

Participants were outpatients from 8 clinical sites of the Residency Research Network of Texas, a collaboration of family medicine residency programs. Eligibility criteria included adults ages 18-74 who spoke English or Spanish.
Procedure. Medical student research assistants offered surveys to 829 patients waiting for office visits. 637 patients completed surveys, for a participation rate of 77%.
Measures. The 118- item patient survey included patient demographics, BMI, diet, physical activity, literacy, health locus of control, and the following scales.
The Capability Assessment for Diet and Activity (CADA) was a 38-item measure of opportunities for healthy diet and physical activity with 9 subscales: Convenience, Barriers, Knowledge, Support (Family, Nonfamily, and Spouse), Opportunity, Time, and Respect. Subscale scores were means of item responses, coded so that higher scores represented greater opportunity.
Short Form-12 (SF-12) assessed subjective health, function and well being. It has 12 items and 8 subscales, including physical function, role function-physical, role function-emotional, bodily pain, general health, vitality, social function, and mental health. High scores indicate good health or function, except for bodily pain.

Figure 1 - Patient Demographics

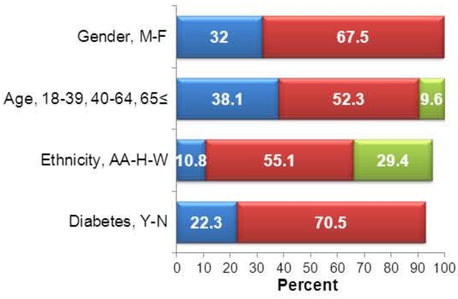


Figure 2 - Correlation Between Age and CADA

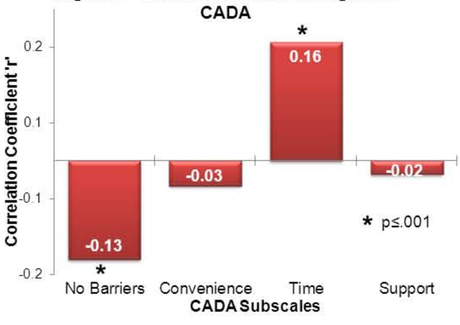


Figure 3 - Mean Health Status Scores

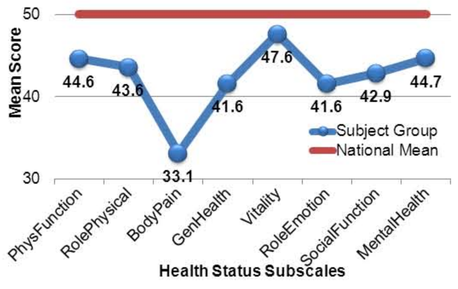


Figure 4 - Mean CADA Scores in Diabetics/Non-Diabetics

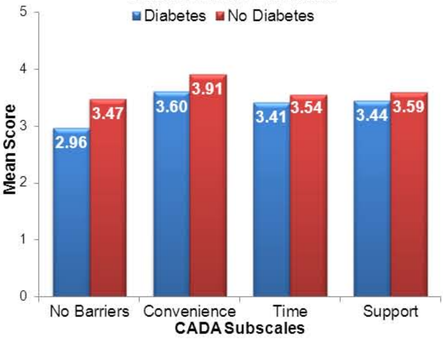
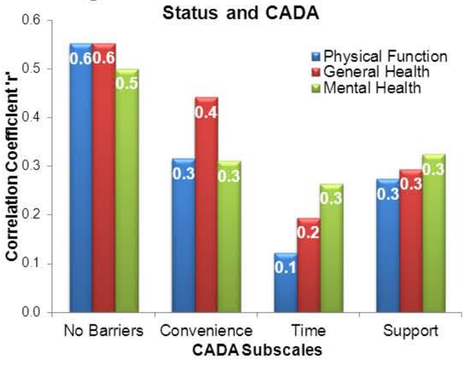


Figure 5 - Correlation Between Health Status and CADA



Conclusion

On average, diabetics have decreased opportunities for healthy behaviors. Time was the only subscale with no significant difference between diabetes/ no-diabetes groups.

This sample scored lower than the national average (50) on each Health Status subscale and could be considered less healthy than the average American. Health Status is also a good predictor for opportunities for healthy behaviors with strong correlations. Healthier patients have better opportunities for healthy behaviors.

Another interesting finding is that older patients have more time for food and physical activity, but they also acquire more barriers to them. An older patient may have more time to cook or do garden work, but may also be limited by illness or depression.

Primary care physicians should be well informed about the available community resources for older patients, particularly those who have limited transportation or physical disabilities. Informing patients about those resources can provide more opportunities for healthy behaviors, thus alleviating some of the disparity between diabetic and non-diabetic patients

Acknowledgements

This study was conducted in The Residency Research Network of Texas (RRNeT) with support from the Office of the Medical Dean at UTHSCSA, the Texas Academy of Family Physicians Foundation, and the Health Resources and Services Administration (Award # D54HP16444). A special thanks goes to Dr. Sunand Kallumadanda and staff from Family Medical Clinic UT in McAllen, TX for their assistance with this project.

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