

Knowledge, Attitude and Lifestyle Practices on Primary Prevention of Dementia

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OBJECTIVE & BACKGROUND

The effectiveness of knowledge, attitudes, and healthy lifestyle practices (KAPs) in delaying dementia has been demonstrated on healthy populations. The purpose of this study was to determine predictors of healthy lifestyle practices among seniors in Raleigh. Transtheoretical stages of change theory guided the study and the purpose of the research was achieved by responding to the following research questions with their associated null and alternative hypotheses:

- RQ1: What is the level of knowledge of study participants on primary prevention of dementia in the community?
 RQ2: What is the attitude of the study participants toward primary prevention of dementia in the community?
 RQ3: What are the lifestyle practices for primary prevention of dementia exhibited by the study participants in the community?

METHODOLOGY & ANALYSIS

A quantitative, cross-sectional research design was used to select a random sample of 300 residents of 2 seniors-only housing properties; ages of participants ranged from 55 to 95 years. Data on scales associated with KAPs were obtained through a self-administered Health-Promoting Lifestyle Profile survey. All statistical data analysis were performed with SAS. The level of statistical significance was set at $p < 0.05$. The responses of each study participant to the question items in the survey instrument, the independent variables, as a whole determined the participant's healthy lifestyle score, the dependent variable. There were four steps in the data analysis:
 Step 1: The internal consistencies for the healthy lifestyle knowledge subscales and practice of health promoting lifestyle subscales were assessed by Cronbach's coefficient alpha.
 Step 2: RQ1, RQ2 and RQ3 were analyzed using one-sample t -test and sign test.
 Step 3: A series of ANOVAs was conducted to examine the main effects of each of the independent variables on the dependent variable and it ends with selection of the significant independent variables.
 Step 4: The selected independent variables in Step 3- healthy lifestyle knowledge, marital status, income, and medical knowledge -were used to build a prediction model (GLM) for the dependent variable based on type III sums of squares, and also by using SAS PROC GLMSELECT in a stepwise fashion.

RESULTS & FINDINGS

Most participants were females (63.6%), Caucasians (60.2%), educated (38.6% HS/GED, & 32.6% college graduates and with annual income of more than \$20,000 (76.67%).
 Step 1 Analysis/Test-Retest Reliability: A good overall Cronbach's coefficient alpha of 0.615948 was obtained from assessment of KAPs subscales and it provided acceptable lower boundary for the reliability coefficient for test-retest reliability.
 Step 2 Analysis/Test of RQ 1, RQ 2 and RQ 3: At $p < 0.05$ level the three null hypothesis for KAPs were all rejected ($p < 0.0001$) by the One sample t -test and Sign test.

Results of summary statistics, one-sample t-tests, and sign tests for RQ1, RQ 2, and RQ 3

Variable	N	Mean	Median	SD	Min	Max	Kurtosis	Skewness	t value	M
HLS	300	3.90	4	1.08	1	6	-0.3013	-0.0691	-14.93	-139.5
HLK	300	4.62	5	1.60	0	6	0.6604	-1.2624	-33.54	-95
MK	300	0.83	1	0.37	0	1	-1.7979	-1.2405	-7.73	-25

Note: HLS is Healthy Lifestyle Practices, HLK is Healthy Lifestyle Knowledge, MK is medical knowledge, N is the sample size, M is the test statistic for the sign test and SD is the standard deviation.

Step 3 Analysis/Univariate ANOVAs: The results of ANOVAs indicate that healthy lifestyle knowledge ($p < 0.0001$), marital status ($p < 0.0197$), income ($p < 0.0028$), and medical knowledge ($p < 0.0004$) had statistically significant effects on healthy lifestyle practice and they were used in prediction model in Step 4 analysis.
 Step 4 Analysis/GLM: The test results of GLM based on type III sums of squares, and result obtained using SAS PROC GLMSELECT for GLM all indicate that only score of healthy lifestyle knowledge has a statistically significant effect on score of healthy lifestyle practice. The final prediction model for score of HLS obtained is: score of HLS = 3.0910 + 0.1766 X score of HLK

Test Results of GLM. Dependent variable: healthy lifestyle practice
 Independent variable: healthy lifestyle knowledge, marital status, income, and medical knowledge. Type III sums of squares

Variable	DF	Type III SS	F-value	p-value
HLK	1	7.1017	6.74	0.0099*
Marital Status	3	7.7320	2.45	0.0641
Income	4	9.1131	2.16	0.0734
MK	1	0.9136	0.87	0.3526

* indicates that the effect is statistically significant at $p < 0.05$

CONCLUSIONS

The research findings and analysis imply that residents of the Raleigh community were found to be deficient regarding their KAPs on primary prevention of dementia as espoused in the scientific literature. The results of the data analysis revealed that only the score of a participant's healthy lifestyle knowledge can predict the healthy lifestyle practice of the participant. The study is important to social change because it will help the people and leaders in Raleigh to be aware of the deficiency in the KAPs on primary prevention of dementia.

CONTACT INFORMATION

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