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HEALTH PRACTICES OF THE MIDDLE-AGED IN A LOCAL COMMUNITY: A GERIATRIC NURSING APPROACH

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ABSTRACT

This study assessed the health practices among 68 middle-aged individuals with diagnosed illness who are living in Barangay Looc, Mandaue City. It utilized the descriptive-correlational research method. Specifically, the study revealed the significant relationship between the profile of the respondents and their health practices and the findings served as the basis for a proposed health teaching program. Health Promotion Model by Nola J. Pender was used to determine the health practices of the respondents. Simple percentage, weighted mean and chi-square were utilized to treat the data (Tillett & Ames, 2010).

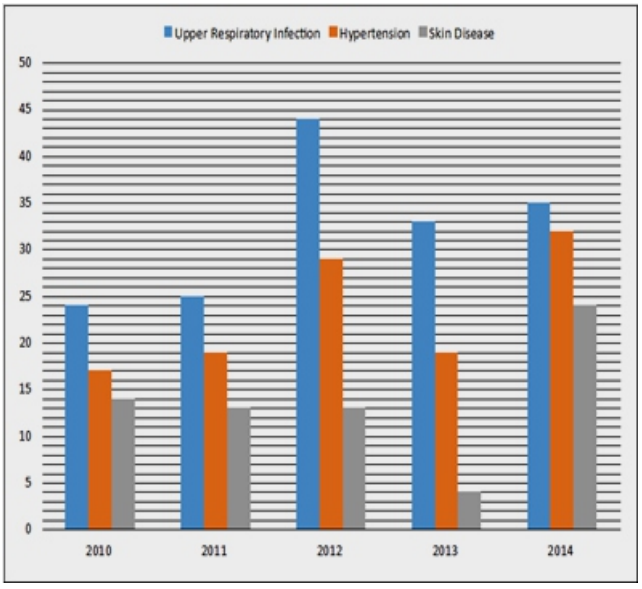
According to the results, majority of the respondents are female, overweight, high school level, with a total monthly income of below 5,000 and diagnosed with hypertension. Most of them believed that his/her life has a purpose; they accept those things in life which they cannot change. They are also aware of what is important to their life, and work towards long-term goals in life.They praise other people easily for their achievements. Findings revealed that there is no significant relationship between the profile of the respondents and their health practices.

Keywords: Health practices, Middle-aged, Stress management, Health responsibility, Interpersonal support, Self-actualization

INTRODUCTION

Middle adulthood is a dynamic time in which the individual experiences biological, physiological, social, psychological and spiritual changes. It is the period when poor health habits begin to catch up. In 2014, the Philippine Statistics Authority–National Statistical Coordination Board reported that there are 19,595,000 middle-aged Filipinos. In the same year, DOH Region VII Reported Hypertension as the top morbidity with more than 14,000 reported cases. Second is Upper Respiratory Tract Infection with total reported cases of more than 9,000. Skin disease is the next with more than 1,000 cases.

Figure 1 shows that the top 3 causes of morbidity in Brgy. Looc from 2010-2014 are Hypertension, Upper Respiratory Tract Infection and Skin Diseases, which is also consistent with the regional report. Thus, there is a need to conduct the study on health practices of the middle-aged.



Source: Office of the Brgy. Captain- Brgy. Looc Data Archives

Figure 1: Top 3 causes of Morbidity among Middle-aged in Brgy. Looc

This study was anchored on the Health Promotion Model by Nola J. Pender. This theory notes that each person has unique personal characteristics and experiences that affect subsequent actions (Tillett & Ames, 2010). Pender, Murdaugh & Parsons (2014) developed the idea that promoting optimal health supersedes preventing disease. Figure 2 illustrates the Health Promotion Model. Health promoting behaviors should result in improved health, enhance functional ability and better quality of life at all stages of development. The health promotion model described the multidimensional nature of persons as they interact within their environment to pursue health. It focuses on three areas, (1) Individual characteristics and experiences (2) Behavior-specific cognitions and affect and (3) Behavioral outcomes (Pender *et al.*, 1992). Rosenstock (2011) also noted that positive health practices and beliefs as described in the Health Belief Model are more likely to occur among middle class people who have a future orientation, who make deliberate plans and favor long-term goals over immediate gratification. This theory is generally taken as marking the beginning of systematic and theory-based research on health behavior.

Many middle-aged adults remain healthy; however, the risk of developing health problem is greater than the young adult. Lifestyle patterns in combination with aging, family history and developmental stressors and situational stressors are often related to health problems that arise later in life. Health promotion during the middle-adulthood involves activities that promote general well-being. These activities are categorized as patterns of healthy eating, healthy activity, and effective coping of stress (Berman, Kozier & Erb, 2010).

Youth ends at 35 years of age and old age begins at 58. In between – all 23 years – is your middle age. People experience many transitions in their work and family roles during this period, encountering a widening circle of relationships and new responsibilities for the care and guidance of others. Every middle aged adult typically engages in all of following developmental tasks during middle adulthood: managing a career, nurturing intimate relationship, expanding caring relationships, and managing the household (Newman & Newman, 2012).

Some of the causes of injury and premature death in middle-aged adults are associated with alcohol and drug abuse and smoking. Alcohol abuse results in specific health problems, including withdrawal syndrome; hepatitis, cirrhosis, and pancreatitis; and cancers of the liver, oropharynx (especially in smokers) and esophagus as well as an increased risk of breast cancer. Alcohol is associated with more than 50% of all injuries. Drug abuse is more common among men, the unemployed, and people without a high school education. Although drug abuse is more prevalent in urban communities, rural communities are not immuned (Black, Hawks & Keene, 2009).

Furthermore, the self-destructive habits of the middle-age adult that have been practiced for years (cigarette smoking, excessive alcohol use and overeating) begin to have visible consequences. As pressure increases, adults are tempted to turn to substances such as these as a crutch for coping with stress. The need to exercise and control weight, decrease or stop smoking cigarettes and alcohol consumption can also be identifiedas needs (Edelman & Mandle, 2010).

Male mortality rates have always been higher than female rates for the leading causes of death, with the exception of diabetes. Women live approximately 6 years longer on average than do men. Death rates are lowest among married men and highest in divorced men. Single, widowed, and divorced middle-age men generally demonstrate a higher mortality rate than do those who are married. Chronic and degenerative diseases are less pronounced in women. The primary cause of death for both genders over age 45 is heart disease. Women are more likely than men to have arthritis, colitis and gallbladder disease. Men, conversely, have an increased likelihood of developing ulcers, hernias, and emphysema. Injuries are also more common in men (Edelman & Mandel, 2010).

People with more education are likely to live longer, to experience better health outcomes and to practice health-promoting behavior such as exercising regularly, refraining from smoking and obtaining timely health care check-ups and screenings. Even with the same overall socio-economic status, those with more education tend to experience better health compared to those with less education. Effort to address health should, therefore, include making quality education at all levels widely accessible to population (Reigelman & Kirkwood, 2015).

Employed individuals tend to be better at health

compared to the connection between socio-economic status and health. Having an income assists a person's ability to secure resources such as housing, food and education that may protect and promote health. Being employed can also assist in accessing health services if the employer provides health insurance to its employees. Type of employment can also affect health. Some jobs are more hazardous to health than others. Those who are unemployed also face psychological consequences due to the anxiety and stress that can be associated with the lack of job security and inability to adequately provide for their family (Reigelman & Kirkwood, 2015).

Black, Hawks & Keene (2009) states that the middle-aged adult is at a greater risk than the young adult for diseases associated with genetics (familial characteristics), including diabetes, hypertension, Huntington chorea, arteriosclerosis, gout, obesity, heart disease, and alcoholism. Some malignancies tend to be hereditary; for example, women with a personal or family history of breast cancer have an increased risk. Additionally, individuals with a family history of colorectal cancer, rectal or colon polyps, or ulcerative colitis are at high risk for colorectal cancer.

The researchers are Clinical Instructors of University of Cebu-Lapulapu and Mandaue College of Nursing. As nurse clinicians, it is important to have this assessment in Brgy. Looc. Apart from being an adopted barangay, it could impact the community as a whole. This will also provide an information, education and dissemination to the Barangay and to have a concrete data common health practices of the elderly.

RESEARCH METHODOLOGY

This study aimed to identify the health practices among middle-aged residents in Barangay Looc, Mandaue City. The findings of this study served as the basis for a proposed health teaching program. Specifically, it sought to answer the following questions: (A) The profile of the respondents in terms of gender; civil status; BMI; educational attainment; monthly income and diagnosed illness, (B) The health practices among the middle-aged hypertensive residents in terms of: (A) self-actualization; (B) health responsibility; (C) exercise; (D)stress management; (E) interpersonal support; (F) nutrition. The findings will be correlated, and a health teaching program will be proposed based on the findings.

This study utilized a descriptive-correlational design in determining the health practices among middle-aged hypertensive residents in Brgy. Looc, Mandaue City. Barangay Looc, Mandaue City is a 135.26 hectares land area consisting of 15 sitios, namely: Baybayon, Kawayanan, Superior, Back LTO, Bohol-Bohol 1, Bohol-Bohol 2, Roadside, Centro, Kalubihan, Paradise Island, Bantayansa Hari, Riverside, San Antonio, Isla de Palma, Sitio Pokang. This study utilized a standardized questionnaire, The Health Promoting Lifestyle Profile (HPLP) by Susan S. Walker, in order to gather the necessary data. The HPLP is an instrument that consists of a 52-item questionnaire scored by a 4-point summated rating scale. Ideas for HPLP were garnered from published sources that suggest "clusters" of activities that people perform for their own health purposes.

It consists of 6 subscales that include: Self-Actualization which is stated in numbers 6, 12, 17, 18, 24, 30, 36, 42, 48 and 52, Health Responsibility which is stated in numbers 3, 9, 15, 21, 27, 33, 39 and 45, Exercise which is stated in numbers 4, 10, 16, 22, 28, 34, 35 and 46, Stress Management which is stated in numbers 5, 11, 23, 29, 41 and 47, Interpersonal Support which is stated in numbers 1, 7, 13, 19, 25, 31, 37, 43, 49, and 51, and Nutrition which is stated in numbers 2, 8, 14, 20, 26, 32, 38, 44 and 50. These 6 subscales were derived from components of the Health Promotion Model, which attempts to provide the framework for articulating health promotion lifestyles. The instrument is scored from 0 to 3 with 0=never, 1=sometimes, 2=often and 3=routinely After the research problem was approved by their research adviser, research instructor, program research coordinator and the campus research coordinator, a letter asking permission to conduct the study was forwarded to the University of Cebu – Lapu Lapu and Mandaue College of Nursing Dean for approval. When approved, the researchers sent a formal letter to the appropriate authorities to conduct the study.

A signed letter of consent of the respondents and ethical committee was secured to ensure that no rights will be violated. The purpose of the study was explained including the strict confidentiality of the results. The researchers were available during the data gathering procedure to assure any query clarifications that may

arise. The researchers presented a brief introduction of this study to the respondents. Furthermore, the measurement of data involves acquiring the cooperation of respondents in varying degrees. Treatment of Data includes simple percentage, weighted mean and chi-square.

Table 1: Profile of the Respondents

Variable	Frequency	Percentage
A. Gender		
Male	26	38.80%
Female	41	61.20%
B. Body Mass Index		
Underweight	4	6.00%
Normal	26	38.80%
Overweight	37	55.20%
C. Highest Educational Attainment		
Elementary Level	12	17.90%
Elementary Graduate	15	22.40%
High School Level	20	29.90%
High School Graduate	9	13.40%
College Level	11	16.40%
D. Monthly Income		
Below php 500	45	67.20%
php 5,001- 10,000	13	19.40%
php 10,001- 15,000	9	13.40%
E. Diagnosed illness		
Hypertension	51	75.00%
Upper respiratory tract infection	12	18.00%
Skin Disease	2	3.00%
Diabetes Mellitus	22	32.00%
Arthritis	13	19.00%
Urinary tract infection	1	1.00%
Others: Asthma, Goiter, Anemia, Stroke, Cholecystitis, Myoma, Pterygium	4	6.00%

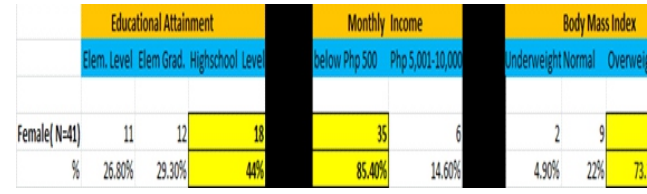
RESULTS AND DISCUSSION

Table 1 presents the profile of the respondents. It revealed that majority of the respondents are female, overweight, with high school level education, with a total monthly income of below 5,000 and diagnosed with hypertension.

Women with less education and low income are at an increased risk for being overweight as presented in Table 2 (Buttaro *et al.*, 2012). A study on urban adults by the Commission on Health (2010) found that knowledge about the health effects of smoking was generally low among women. Chronic and degenerative diseases are less pronounced in women (Edelman & Mandle, 2010).

Even with the same overall socioeconomic status, those with more education tend to experience better health compared to those with less education (Reigelman & Kirkwood, 2015). They stated that having an income assists a person's ability to secure resources that may protect and promote health, such as housing, food and education. Higher prevalence of smoking occurs in lower socioeconomic groups. In addition, behavioral factors such as physical exercise might be linked to deprivation in the sense that the possibilities to engage in this health promoting behavior might be limited by financial means.

Table 2: Cross Tabulation



	Educational Attainment			Monthly Income		Body Mass Index		
	Elem. Level	Elem Grad.	Highschool Level	below Php 500	Php 5,001-10,000	Underweight	Normal	Overweight
Female(N=41)	11	12	18	35	6	2	9	30
%	26.80%	29.30%	44%	85.40%	14.60%	4.90%	22%	73.20%

Black & Hawks (2010) also stated that the middle-age adult is at greater risk than the young adult for disease known to be associated with the genetics (familial characteristics), including hypertension. During the middle-age, the risk of developing a health problem is greater than the younger adult. Fat deposition increases during these years, with the increase in weight.

Table 3 describes the health practices of the middle-aged in Barangay Looc which are categorized into spiritual growth, health responsibility, exercise, stress management, interpersonal support and nutrition.

Table 3: Health Practices of the Respondents

Statement #	Health Promoting Lifestyle	Score	Interpretation
	HEALTH RESPONSIBILITY		
3	Report any unusual signs and symptoms to a physician or other health professional	3.2	Often
9	Read or watch tv programs about improving health	2.2	Sometimes
15	Question health professionals in order to understand their instructions	2.5	Sometimes
21	Get a second opinion when I question my health care providers' advice	2.4	Sometimes
33	Inspect my body at least monthly for physical changes/ Danger signs	2.3	Sometimes
39	Ask for information from health professionals about how to take good care of myself	2.3	Sometimes
45	Attend educational programs on healthcare	2.5	Sometimes
27	Discuss my health concerns with health professionals	2.3	Sometimes
	PHYSICAL ACTIVITY		
4	Follow a planned exercise program	2.5	Sometimes
10	Exercise vigorously for 20 or more minutes at least 3 times a week (such as walking, cycling, aerobic dancing, using a stair-climber)	2.5	Sometimes
16	Take part in light to moderate physical activity (Such as sustained walking for 30-40 minutes)	2.5	Sometimes
22	Take part in leisure time (recreating) physical activities (such as swimming, dancing, cycling)	2.4	Sometimes
28	Do stretching exercise at least 3 times per week	2.3	Sometimes
34	Get exercise during usual daily activities (such as walking during lunch, using stairs in stead of elevators, parking car away from destination and walking.)	2.3	Sometimes
35	Balance time between work and play	2.4	Sometimes
46	Reach my target heart rate when exercising	3.0	Often
	NUTRITION		
2	Choose a diet low in fat, saturated fat and cholesterol	3.5	Often
8	Limit use of sugar and food containing sugar (sweets)	2.4	Sometimes
4	Eat 6-11 servings of bread, cereals, rice and pasta each day	2.5	Sometimes
20	Eat 2-4 servings of fruit each day	2.4	Sometimes
26	Eat 3-5 servings of vegetable each day	2.3	Sometimes
32	Eat 2-3 servings of milk, yogurt or cheese each day	2.3	Sometimes
33	Eat only 2-3 servings from the meat, poultry, fish, dried beans, eggs and nuts group each day	2.3	Sometimes
44	Read labels to identify nutrients, fats and sodium content in packaged foods	2.5	Sometimes
50	Eat breakfast	3.8	Moderately

In the category health responsibility, the health practice that is done often is category 3 (reporting any unusual signs and symptoms to a physician or other health professional), while the rest of the health responsibilities are rarely performed. Personal responsibility for lifestyle choices are increasingly being challenged as the complex relationship between socio-cultural and environmental conditions and personal choices are recognized. Individuals make frequent lifestyle choices that affect their health and it is intuitively assumed that these choices are made through free will. They fail to acknowledge that health behaviors are influenced by many competing factors: cultural pressures, health literacy, health inequalities, mental capacity, genetic predisposition, and in the case of smoking and alcohol, addiction to a substance. Understanding which risk factors are within or outside of the individual's control is necessary when discussing responsibility for health. Individual personal responsibility for health is also dependent on cultural pressures, health literacy, health inequalities, mental capacity, genetic predisposition and in case of smoking and alcohol, addiction to a substance (Thirlaway & Davies, 2013).

For the physical activity category, the only practice that is done often is category 46 (reaching target heart rate when exercising) while the rest of the practices are sometimes done. Based on the activity pyramid, middle-aged individuals should cut down watching television, playing computer games and sitting for more than 30 minutes at a time, and try to increase their physical activity (Black & Hawks, 2010).

According to Justine *et al.*, (2013), the most common external barriers among the middle-aged respondents were "not enough time" (46.7% vs. 48.4%), "no one to exercise with" (40.0% vs. 28.3%) and "lack of facilities" (33.4% vs. 35.0%). The most common internal barriers for middle-aged respondents were "too tired" (48.3%), "already active enough" (38.3%), do not know how to do it" (36.7%) and "too lazy" (36.7%). In terms of their nutrition, majority of the respondents would routinely eat breakfast and the rest of the health practices are sometimes performed except choosing a low fat diet. As a result they eat saturated fat resulting in high blood cholesterol levels.

In the middle-age, preventive nutrition can promote wellness and help organ systems to function optimally throughout aging. Preventive nutrition is defined as

dietary practices directed toward reducing disease and promoting health and well-being. Healthy eating in general – such as eating unrefined carbohydrates instead of refined carbohydrates and avoiding trans fat and saturated fats- helps to promote wellness. Other example include consuming foods high in antioxidants, such as strawberries, blueberries and other colorful fruits and vegetables, to reduce the risk of cancer (Jacobs *et al.*, 2011).

Table 4: Spiritual Growth, Interpersonal Relations and Stress Management of the Patient

Statement #	Health Promoting Lifestyle	Score	Interpretation
	SPIRITUAL GROWTH		
6	Feel I am going and changing in positive ways	2.5	Sometimes
12	Believe that my life has purpose	3.8	Routinely
17	Accept those things in my life which I cannot change	3.8	Routinely
18	Look forward to the future	3.1	Often
24	Feel content and at peace with myself	3.2	Often
30	Work towards long-term goals in my life	3.8	Routinely
36	Find each day interesting and challenging	2.4	Sometimes
42	Be aware of what is important to me in life	3.7	Routinely
48	Feel connected with some force greater than myself	2.5	Sometimes
52	Expose myself to new experiences and challenges	2.5	Sometimes
	INTERPERSONAL RELATIONS		
1	Discuss my problems and concerns with people close to me	2.4	Sometimes
7	Praise other people easily for their achievements	3.8	Routinely
13	Maintain meaningful and fulfilling relationship with others	3.0	Often
19	Spend time with close friends	2.4	Sometimes
25	Find it easy to show concerns, love and warmth to others	2.3	Sometimes
31	Touch and be touched by people who I care about	2.3	Sometimes
37	Find ways to meet my needs for intimacy	2.3	Sometimes
43	Get support from a network of caring people	3.3	Often
49	Settle conflicts with others through discussion and compromise	3.4	Often
51	Seek guidance or counselling when necessary	1.1	Never
	STRESS AND MANAGEMENT		
5	Get enough sleep	3.3	Often
11	Take some time for relaxation each day	3.3	Often
23	Concentrate on pleasant thoughts at bedtime	3.4	Often
29	Use specific methods to control stress	2.3	Sometimes
41	Practice relaxation or meditation for 15 -20 minutes daily	2.4	Sometimes
46	Pace myself to prevent tiredness	3.5	Often

In terms of spiritual growth, majority of the respondents would routinely believe that his/her life has a purpose, accept those things in his/her life which he/she cannot change, work towards long-term goals in life and are aware of what's important to him/her in life. However, the respondents would sometimes feel he/she is growing and changing in positive ways, find each day interesting and challenging, feel connected with some force greater than him/herself and expose him/herself to new experiences and challenges.

According to Goldstein, spiritual growth is "the tendency to actualize, as much as possible, individual capacities" in the world. The tendency to it is "the only drive by which the life of an organism is determined". It is a driving life force that will ultimately lead to maximize one's abilities and determine the path of one's life and is considered to be a growth need, which continues to motivate behavior after it is satisfied (Edelman & Mandle, 2010).

Moreover, in stress management, the respondents would often get enough sleep, take some time for relaxation each day, concentrate on pleasant thoughts at bedtime and pace him/herself to prevent tiredness but would only sometimes use specific methods to control their stress and practice relaxation or medication for 15-20 minutes daily.

Berman, Kozier & Erb (2010), stated that anticipated barriers to action may be imagined or real. They consist of perceptions concerning the unavailability, inconvenience, expense, difficulty or time consuming nature of a particular action. Loss of satisfaction from giving up health-damaging behaviors such as smoking or eating high-fat foods to adopt a healthier lifestyle may

also constitute a barrier.

Table 5 presents the relationship between the profile and their health practices. Findings showed that there is no significant relationship between the respondent's profile and their health practices on self-actualization, health responsibility, exercise, stress management, interpersonal support and nutrition.

In contrary, Fingerman (2012), suggested that the extent to which people were exposed to interpersonal problems as well as their reactions to those problems varied from younger adulthood to old age on his study on Age Differences in Exposure and Reactions to Interpersonal Tensions. Older people reported fewer interpersonal tensions than younger people. Overall, these findings suggest that people may become better able to regulate their responses to problems as they age.

Rowan *et al.*, (2009) on his study stated that in contrary to the findings of this research study, that screening behaviors were associated with gender and age. Men and women >51 years were more likely (27%) to have screening health checks than those <50 years (2%). Factors nominated to influence health were lifestyle (92%), relationships (82%), and environment (80%). Women were more likely to nominate preparedness to have an annual health check, willingness to seek advice from their medical practitioner and to attend education sessions. Little is understood about age differences in screening practices and perceived needs as they relate to prevention of illness. It is also unclear whether individuals perceive that their health is their own responsibility, if they act on these perceptions, or if they rely on health professionals to implement health checks. What is known is that barriers to screening include the perceived need for a referral, lack of discussion with health care providers.

Table 5: Relationship between Respondent's Profile and Health Practices

Relationship Between the Profile and Health Practices			
Variables	**Critical x2-Value**	**Decision**	**Interpretation**
Age*Health Practices	Pvalue= .797 df= 18 a= .05	Accept HO	NOT SIGNIFICANT
Gender* Health Practices	Pvalue= .912 df= 1 a= .05	Accept HO	NOT SIGNIFICANT
BMI* Health Practices	Pvalue= .938 df= 2 a= .05	Accept HO	NOT SIGNIFICANT
Educational Attainment * Health practices	Pvalue= .313 df= 4 a= .05	Accept HO	NOT SIGNIFICANT
Income* Health Practices	Pvalue= .059 df= 2 a= .05	Accept HO	NOT SIGNIFICANT

CONCLUSION AND RECOMMENDATIONS

Majority of the respondents are female, overweight, high school level, with a total monthly income of below 5,000 and diagnosed with hypertension. Most of the respondents believe that his/her life has a purpose, accept those things in my life which he/she cannot change, aware of what is important to him/her in life, work toward long-term goals in her/his life, praise other people easily for their achievements and eats breakfast. Findings revealed that there is no significant relationship between the gender, civil status, body mass index, educational attainment, monthly income and diagnosed illness with the health practices amongthe middle-aged in terms of self-actualization, health responsibility, exercise, stress management, interpersonal support and nutrition. The researchers conclude that gender, civil status,body mass index, educational attainment, monthly income and diagnosed illness do not influence their health practices on self-actualization, health responsibility, exercise, stress management, interpersonal support and nutrition. For future researchers, the following topics are recommended: (A) Compliance of middle-aged individuals with diagnosed illness to their specific treatment regimen; and (B) Effective ways to increase adherence to healthy habits and cost-effectiveness of such efforts. Moreover, a Proposed Health Teaching Program will be disseminated through University Research and Statistics Office (URSO) and CARES.

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