

Health Teaching: Village Pointe

Jessica Chamberlain, Marian Gemender, Victoria Grigorita, Shannon Harris, Aubrey Hogge,

Melissa Johnston, Cecile Perez-Collantes, and Laura Pozo

Old Dominion University

Health Teaching: Village Pointe

The aggregate is comprised of residents living at Village Pointe (VP), a retirement facility that provides affordable housing for older adults. VP is a 60-unit community that offers subsidized housing to low-income older adults with rent payments fixed at about 30% of their individual adjusted income. All residents must be 62 years of age or older to apply to live at VP. The residents are diverse in age, gender, race, ethnicity, sexual orientation, and marital status, but all are well accepted into the VP apartment community.

This aggregate was selected based on multiple variables. VP is three to four blocks away from Old Dominion University (ODU), providing easy access for nursing students because of its close proximity. Due to the age of the aggregate (62 and older), there are a variety of needs and health concerns that are imperative to address in order to provide improvement and maintenance of health status and improve quality of life. Some of these needs and concerns include self-management of hypertension and diabetes, nutritional foods and meals, physical activity, complementary and alternative methods of pain management (e.g., pain from arthritis), and dental care. The method for gaining entry into this aggregate's community is through past relationships that VP has had with the School of Nursing from ODU as well as through discussion with the residents that we are there to assist them in various health needs and concerns in attempts to improve their health status and overall quality of life. Through open communication and true desires to assist with this aggregate, we believe the residents and our group will form an ideal therapeutic relationship and collaboratively work towards meeting desired health needs.

Socio-Demographic Characteristics

The VP retirement apartment community houses about 100 residents. Out of 100 residents, about 15 to 20 residents participate in the meetings coordinated by ODU's nursing students. Surveys were conducted with the residents during these meetings that gave nursing students valuable socio-demographic information (Appendix A). Based on these surveys, the length of stay of the residents ranges from one month to thirteen years, with a mean of five years. The ages range from 65-years-old to 83-years-old, with a mean of 74-years-old. Fifty-four percent of the people are in the 65-74 age cohort and 46% are in the 75-84 age cohort, with none of the aggregate older than 85. As of 2008, people in the United States (U.S.) that fall within the age cohort of 65-74 outnumber all other age groups (Meiner, 2011). This statistic is significant as it is consistent with what we found in our aggregate.

The majority of the aggregate surveyed were females. This is consistent with national statistics, which state that older women (24.3 million) outnumber older men (18.8 million) (Administration for Community Living, 2013). However, in the state of Virginia, about 51% of older adults are females and 49% are males. In the city of Norfolk, the numbers are even more different, with 48% females and 52% males (The Virginia Atlas of Community Health, 2013). The fact that our aggregate consists mostly of women can be explained by the tendency of women to be more interested in the health promotion activities.

Eighty-five percent of those surveyed were African American and 15% were Caucasian. This statistic is very different from national data, where 73% of population accounted for Caucasians and 9% for African Americans (Administration for Community Living, 2013). However, the data for the city of Norfolk is more consistent with our aggregate data of 48% Caucasians and 42% African Americans (The Virginia Atlas of Community Health, 2013). This

data can be explained by the income factor. In order to reside in VP, residents have to be retired with low income. According to national statistics, older African Americans tend to be poorer than older Caucasians; one of every 11 older Caucasian adults (9.4%) is poor compared to one out of four older African American adults (24.4%) (Meiner, 2011). Seventy-seven percent of the aggregate preferred not to share their income amount. However, among those who did, 15% identified their income as \$10,000-\$20,000 and 8% as less than \$10,000. According to the national statistics, the median income of older adults is \$16,040 for females and \$27,612 for males (Administration for Community Living, 2013).

Sixty-nine percent of those surveyed completed high school, and 23% stated that they have a college degree. This is consistent with national statistics, where about 87% of older Caucasian adults and 71% of older African American adults completed high school (Administration for Community Living, 2013). Eight percent of the aggregate did not graduate high school, which is consistent with the data of Norfolk, where 13% of population did not graduate high school (The Virginia Atlas of Community Health, 2013).

The majority of those surveyed stated that they live alone, with one stating that she lives with a spouse. According to national statistics, about 35% of older adults live alone; this number increases with age, where nearly half of older adults live alone after 75 years (Administration for Community Living, 2013). Those surveyed showed correspondence with the national statistics regarding widowed (46% of aggregate, 36% national) and divorced or separated (46% of aggregate, 13% divorced) elderly individuals (Administration for Community Living, 2013).

Forty-six percent of the aggregate uses public transportation, 15% facility transportation, and 31% private transportation. According to the national statistics, one in five older adults do not drive due to various reasons (Administration for Community Living, 2013). This data is not

consistent with the aggregate possibly due to the fact that our aggregate has a lower socio-economic status and therefore less likely to own a car and more likely to use public transportation.

Religion plays a big role in the lives of the aggregate. Ninety-two percent of the aggregate identified themselves as religious, with 84% saying they go to church regularly. According to the national statistics, two-thirds of older adults say religion is very important to them (Pew Research, 2014). Of those surveyed, 67% described their relationship with their family as very close, 25% as close, and 8% as distant. According to national statistics, 9 out of 10 of elderly are in touch with their children (Pew Research, 2014).

Ninety-two percent of the aggregate accounted for using cell phones and 46% stated that they use a home phone (with or without having a cell phone). This number is higher than for national statistics where 23% do not use cell phones (Pew Research, 2014). Fifty four percent of the aggregate stated that they do not use the Internet, which is lower than the national statistics, where 41% of older adults do not use Internet. According to the research, the number of internet/cell phone users drops as age increases. In contrast, younger and more highly educated seniors tend to be active users and go online daily (Pew Research, 2014).

Health Status

The health status of the aggregate at VP was measured using a health survey (Appendix B) and group discussions to assess actual and perceived health needs. Every resident surveyed believed that the hospitals in the area are either good or excellent in their ability to treat health problems related to their age group. When asked how often they go to the dentist for a regular check-up, 30% stated that they go regularly every six months. Fifty percent of the aggregate admitted to either never going to the dentist or going every two or more years. Regarding alcohol

and tobacco, 90% said they do not drink alcoholic beverages, and none admitted to smoking tobacco.

When asked, every resident claimed to be taking medications. All the residents knew why they are taking their specific medications, but 20% admitted to not knowing the names of each medication they are taking. Thirty percent stated that they are in chronic pain, and all the patients with chronic pain are being treated with medication. When asked about complementary and alternative treatment such as relaxation techniques, guided imagery, and music therapy, 30% of the aggregate specified that they would be interested in this type of pain management. Forty percent stated that they are not familiar with complementary and alternative therapy.

The aggregate was asked about their knowledge of advanced directives and if they had one for themselves. Of the residents surveyed, 30% said that they had an advanced directive. Forty percent said that they were familiar with what an advance directive is but do not have one. The aggregate was asked what health issues they have been diagnosed with. The most recurrent diagnosis was hypertension, with 75% of participants stating they had high blood pressure. High cholesterol and arthritis were the next most frequently diagnosed issue at 38%. Other medical conditions mentioned were diabetes, thyroid disease, and diverticulitis. Ninety percent of those questioned had multiple diagnoses.

With regards to health perception, 60% of the population surveyed stated they evaluated their overall health as being in good physical condition with no significant illnesses or disabilities and only routine checkups. Another 20% claimed they were only mildly physically impaired with minor illnesses that may benefit from medical treatment. Seventy percent perceived that they are able to get to places within walking distance independently with no help needed. Twenty percent said they require some help to get to these places, and 10% said they

require special arrangements. During a group discussion, the aggregate mentioned several perceived health needs they were interested in addressing. These include simple, nutritious recipes they could cook; stretching exercises they could learn and practice on their own; and complementary and alternative medicine for pain management.

Internal Factors

There are numerous influences within VP that impact the residents living there. There is a private, open, outdoor space that includes a patio and grassy area for the residents to spend time. The aggregate of VP is able to spend time outdoors within their place of residency. The building has security locks and codes to gain access into the building, as well as fire alarms throughout the building. This provides the residents with increased safety and a sense of security. There are community rooms and libraries in the building for residents to socialize and spend time with one another. VP provides numerous programs and activities that the residents can participate in, such as fitness classes and health maintenance sessions. The internal factors within VP provide the residents with a sense of security and a means to improve their well-being. They are provided resources that enable them to socialize, learn, and exercise.

External Factors

Outside of VP, there are several factors that affect the aggregate. Health facilities, such as Norfolk General and Bon Secours, are in close proximity to the residents, providing access to care if needed. There are also several alternative medicine centers and dental offices nearby. There are several churches and places of worship within the area for the residents to attend. There are two parks, a mall, a grocery store, and numerous restaurants near VP for the residents to enjoy. They have several means of transportation to get in and out of VP including the public bus system, personal vehicles, and walking. There is a fire station and the ODU campus police

station nearby to enhance security and safety around the area. The area surrounding VP has sidewalks and streetlights. Robberies, burglaries, and shootings have been reported in the area, which impacts how safe residents feel outside of the VP community.

Literature Review

Anticipated problems in the elderly population are deficit knowledge regarding medication and prescription non-adherence related to advanced age. The aim of one research article was to describe elderly individuals' knowledge and attitudes about their personal medications. A total of 34 participants, ages 65 or older, with multiple illnesses were included. Seventy-one percent were able to identify 75% of their medications, but about 35% of the 71% were aided by their personal medication list. The participants that showed knowledge deficits in their medications were those with polypharmacy and multi-dose drug administration. Eighty-four percent had no knowledge of possible adverse effects of the different medications they were taking. Despite this knowledge deficit, 93% of the participants did report that the benefits of medications outweighed the costs (Modig, Kristensson, Ekwall, Hallberg, & Midlöv, 2009).

An anticipated need for the elderly is information about advanced directives due to their numerous health conditions and their desire to express the medical care they want. In one study, the authors conducted a systematic review of 113 articles related to advanced care planning in the elderly to determine the effects of advanced care planning on end-of-life care. Analysis of the studies indicated that the use of advanced care planning (e.g., advanced directives and do-not-resuscitate orders) resulted in decrease life-sustaining treatment and an increase in palliative care and hospice care. Also, advanced care planning interventions resulted in higher rates of compliance with patients' end-of-life wishes and positively impacted the quality of end-of-life care (Brinkman-Stoppelenburg, Rietjens, & van der Heide, 2014).

Osteoporosis is anticipated to be a concern for elderly individuals. Curtis and Safford (2012) discussed the management of osteoporosis in the elderly with other chronic medical conditions. It was reported that an estimated 10 million individuals are diagnosed with osteoporosis within the U.S., with about 34 million having low bone mass. Seventy percent of all fractures sustained occur in those 65 and older. Furthermore, among the elderly, fracture outcomes are poorer and have been linked with greater mortality, an increase in long-term care requirement, and significant deterioration of “health-related” quality of life.

Depression in the elderly is another anticipated problem. The authors of a recent research article explored risk factors for depression and the effects of depression on functional status and quality of life in the elderly. One hundred and sixty individuals aged 65 and older were surveyed. The findings indicated more than half of participants were at risk for depression. Those at risk included those who were illiterate, had multiple chronic diseases, had polypharmacy, had osteoarthritis, and had mobility devices. Functional, physical, and mental health scores were all lower in those at risk for depression indicating impairments or deficits in these areas. Overall, the research illustrated an increased risk in depression that resulted in negative impacts on functional status and decreased quality of life (Onat, Delialioglu, & Ucar, 2014).

Diabetes and inadequate dental care are other concerning issues for the elderly. Diabetes has a negative impact on tooth enamel due to breakdown caused by sugar (Amer & Kolker, 2013). As people age, the risk for dental caries increases and their glycemic index requires closer monitoring (Saengtipbovorn & Tannepanichskul, 2014). A study was conducted in Thailand that determined how a lifestyle change along with a proper dental care (LCDC) program could improve the elderly patient’s periodontal status as well as maintain adequate control of their blood glucose level. There were a total of 132 participants with type II diabetes, with 66 in the

control group and 66 in the intervention group. The intervention group attended a one-time, 20 minute LCDC education program that included lifestyle counseling and oral hygiene instructions. The results showed that the patients in the intervention group (group B) had a decrease in hemoglobin A1c from 7.39 to 7.10, and the control group (group A) had an increase from 7.68 to 7.77. Group B had a decrease both in pocket depth and plaque index score, whereas group A had an increase, which signifies worsening tooth decay. The study proved that a LCDC education program was beneficial for elderly patients with type II diabetes in improving glycemic index and decreasing tooth decay (Saengtipbovorn & Tannepanichskul, 2014).

In the United States, 10% of older adults live below the poverty line, and nearly 26% have low income, which makes it harder to have access to healthy food (Kamp, Wellman, & Russell, 2010). Kamp, Wellman, and Russell's research describes food and nutrition programs that are offered to older adults living in the community. The programs included the Older Americans Act (OAA) Nutrition Program, Supplemental Nutrition Assistance Program (SNAP), the Seniors' Farmers Market Nutrition Program, and the Child and Adult Care Food Program. Each program provides a variety of services including home-delivered meals, nutrition education, counseling, and coupons and vouchers for reduced prices. Because the risk of malnutrition increases with age, it would be appropriate to discuss the different nutrition programs offered to older adults to help them maintain a healthy nutritional status and lifestyle (Kamp et al., 2010).

Pain is a chief complaint of the elderly. In a research article by Brown, Kirkpatrick, Swanson, and McKenzie (2011), the pain experience of the elderly was explored using a descriptive study that included an assessment of how prevalent pain is in this population and also which strategies were used to manage pain. The sample consisted of 124 participants that were

60 years and older and relatively independent in function. The results revealed that 85% of the participants had moderate or severe pain in the month prior to the study, with more than 28% of those having pain continuously. Most participants experienced pain in their hips, legs, knees, and ankles. Moderate and severe pain most interfered with walking, general activity, mood, and enjoyment of life and sleeping. As for relieving pain, nearly half of the participants said medication and inactivity were the preferred treatments. Alternative methods, such as heat and cold, were reported to be effective for 28% of total participants, and exercise was effective for 16%. The study concluded that a holistic approach between patient and health care provider would provide better pain management through the use of adequate assessments, a balance of pharmacological and non-pharmacological treatment, and patient education (Brown et al., 2011).

Pain can affect many aspects of life, including daily routine, socialization, and sleep. When pain is not properly managed, quality of life is diminished. Stewart, Leveille, Shmerling, Samelson, Bean, and Schofield (2012) utilized data from the MOBILIZE Boston study (MBS): a population-based cohort study implemented between 2005 and 2008. The current study used a cross-sectional design to get a glimpse of pain management strategies for older adults. The specific aim of the study was to describe pharmacological and non-pharmacological pain management strategies used by the elderly experiencing persistent pain. A total of 765 participants were enrolled in the study. For the current study, participants from the MBS study who reported pain were included, yielding 599 participants. Thirty-five percent reported very mild pain, 33% reported mild pain, and 32% reported moderate to severe pain. One or more pharmacological approaches were used in 49% of participants. One or more non-pharmacological approaches were used in 68% of participants. The use of both strategies were reported in 37% of participants. Exercise (49.7%), nutritional supplements (16.5%), ointments

(14.2%), heat (13.9%), and massage (12.7%) were the top used non-pharmacological strategies. The authors conclude that the elderly population is increasingly becoming more aware and willing to use complementary and alternative methods to manage pain (Stewart et al., 2012).

Pain in the elderly is commonly associated with the many disease processes related to aging, especially arthritis. Persons with arthritis are less likely to participate in physical activities for fear of enhancing pain; however, physical activity is actually more beneficial than harmful. It reduces the occurrence of arthritis pain, increases physical and mental health, and promotes an improved quality of life (Arthritis, 2013). Scarvell and Elkins conducted a systematic review relating aerobic exercise effects on pain, functionality, and quality of life in adults living with rheumatoid arthritis (2011). Through analysis of 14 studies, aerobic exercises indicated significantly lower pain ratings and higher ratings for quality of life by participants compared to the control groups. The analysis also indicated that aerobic exercises did not exacerbate participants' disability or radiological signs of disease (Scarvell, 2011).

Comparison of Health Status

The VP aggregate shows both similarities and differences when compared to similar elderly populations within the area, within Virginia and surrounding states, and within the United States as a whole (Appendix C). Available resources, the economy, socioeconomic status and lifestyle, and diet all effect these similarities and differences. Influences of the health status of the VP aggregate are multifaceted, and focusing on these variables helps to reveal the resident's most pertinent health needs and concerns.

Local

The VP aggregate is similar with elderly populations locally, such as in Norfolk and Portsmouth, due to the characteristics of the area itself as well as resources available. A small

percentage of individuals living in the local cities are of the elderly population, which is similar to our aggregate because they reside in Norfolk. This small percentage is most likely due to the growing population within all of the cities (e.g., cities expanding bringing in younger individuals), the universities in the area that bring in thousands of the younger population, and the multiple military bases (e.g., Naval Station Portsmouth, Fort Eustis, Langley Air Force Base) bringing in military personnel. Furthermore, the aggregate is similar to the local elderly population with regards to different diagnoses such as hypertension and diabetes, which is due to the nutritional practices of the elderly population with eating foods high in fat and sugar. One difference between the aggregate and the local elderly is that the aggregate has expressed desire to work on changing their dietary habits to include more nutritious foods. Finally, the elderly in the area and the aggregate are similar in regards to resources available to assist with health concerns such as primary doctors, rheumatologists, and exercise programs (e.g., offered at recreational centers) (State and County QuickFacts, 2014; Hypertension in Virginia, 2013).

Virginia

When comparing the aggregate to the state of Virginia, there are some similarities and differences. In southern Virginia, the percentage of elderly is similar to the aggregate due to the inexpensive lifestyle that is available in that area, but, in northern Virginia, the percentage of elderly is smaller due to a more expensive lifestyle, the growing Washington, D.C. area, and a large population of younger individuals. Also, the aggregate is similar in relation to percentage of those with hypertension and diabetes compared to southern Virginia than compared to northern Virginia. This is related to the larger number of elderly in southern Virginia, the elderly being less prone to change their daily habits, and the younger population in northern Virginia bringing new and enticing habits (e.g., dietary, exercise) that may bleed into that elderly

population. Also, the elderly population in northern Virginia may have fewer diagnoses of hypertension and diabetes due to the numerous health care systems in the area (e.g., hospitals, outpatient settings) (State and County QuickFacts, 2014; Hypertension in Virginia, 2013).

North Carolina

While the VP aggregate is similar in many ways to the elderly population in North Carolina, there is a greater percentage of elderly residing in this particular state. This is most likely due to the inexpensive living and low property tax in North Carolina. This draws more elderly individuals to this area because they do not have to spend as much money, especially if they are not as financially well off as others. Furthermore, the percentage of elderly in North Carolina with hypertension and diabetes is far greater than that of our aggregate. This is due to the larger percentage of elderly residing in this state as well as the lifestyle habits that the elderly adhere to and very rarely stray from. The resources available are very similar to those of our aggregate such as the various health care systems and health-improvement programs (State and County QuickFacts, 2014).

Maryland

The percentage of elderly individuals in Maryland is slightly lower than that of the local area where VP aggregates reside, but the overall population in Maryland is about three million less than that of Virginia. This means that there are less elderly individuals in Maryland than in Virginia. This is most likely related to the higher living expense, the growing area (e.g., expanding cities bringing in younger individuals), and part of Maryland being in close proximity to the Washington, D.C. area, which has a younger population. Though the percentages of those with hypertension and diabetes is slightly greater than the percentages of those in Virginia, the actual occurrence of these two conditions is likely less than those in Virginia due to the large

population difference between the two states. The resources available to the elderly in Maryland are very similar to those available for the aggregate including health services and exercise programs (State and County QuickFacts, 2014).

United States

Comparing the VP aggregate to the elderly population in the United States revealed some similarities and differences. One similarity is the percentage of elderly in the United States being close to the percentage of elderly in the local area where the VP aggregate resides. This is related to the aging population as a whole throughout the states and the enhancements in health care that allows for individuals to live longer. The diagnoses of hypertension and diabetes are higher than that of the local area where VP aggregates reside, which can be related to the greater number of individuals included in the United States statistics. This can also be due to the lifestyle of the elderly throughout the nation with regards to daily habits that they rarely deviate from and the nutritional habits that they have maintained over the years (e.g., foods high in fat and sugar and consumption of greater portions) without adjusting (State and County QuickFacts, 2014).

Health Needs

The first nursing diagnosis of highest priority is readiness for enhanced nutrition related to deficient knowledge about healthy and proper food choices to assist in controlling hypertension and diabetes as well as continual consumption of non-nutritious food items. This is evidenced by 75% of residents with doctor-diagnosed hypertension, 38% with doctor-diagnosed diabetes, statements of poor food consumption (e.g., canned vegetables, lunch meat, and chips), and a lack of proper education on appropriate nutrition. This is the first priority because a large percentage of residents have been diagnosed with hypertension and diabetes, and there is evidence of improper food consumption.

The second nursing diagnosis is impaired physical mobility related to decreased muscle endurance and pain experienced from certain disease processes evident in the elderly population. This is evidenced by 38% of residents having arthritis and 20% of the residents stating they had mild physical impairments due to other minor illnesses. This is the second priority due to the percentage of residents that already have a physical impairment and due to the prevalent risk factors that make the residents prone to possible debilitating diseases.

Readiness for enhanced self-care with regards to dental hygiene is the third diagnosis related to expressed interest about dental health and lack of knowledge on the importance of regular dental checks. This is evidenced by 30% of residents stating that they go to the dentist regularly and 50% stating either never going to the dentist or only going every two or more years. This is the third priority due to the percentage of residents that do not get annual dentist checks and due to the percentage of residents that have diabetes considering the effects diabetes has on dental health.

The fourth diagnosis is chronic pain related to disease processes experienced by the aggregate as evidenced by 30% of residents stating experiencing chronic pain. This is the fifth priority due to the percentage of residents that are experiencing pain regularly and due to the potential barriers pain poses to daily activities. This nursing diagnosis is of importance to this specific aggregate as expressed by the increased interest in learning about stretches and complementary and alternative methods to pain management alongside pharmacologic methods.

The final diagnosis is knowledge deficit related to advanced directives as evidenced by residents stating not having an advanced directive or not knowing what it is. This is evidenced by only 30% of the residents having one, only 40% knowing what it is but not having one, and an

overall lack of education on advanced directives and the benefits. This is the last priority due to the age of the residents and the various benefits that an advanced directive (or similar document) can have for future health problems that the residents may encounter. These nursing diagnoses were determined based on comparative analysis and interpretation of data collected from surveys and interviews with the residents.

Planning

The primary nursing diagnosis identified for the aggregate is readiness for enhanced nutrition. It is related to several factors. Firstly, it is related to the lack of knowledge about a healthy diet as evidenced by expression of willingness to enhance nutrition and expression of an interest regarding more information about a healthy diet and recipes. Secondly, it is related to the high number of the residents who express interest in information about foods that can help manage hypertension as evidenced by 75% of the aggregate having doctor-diagnosed hypertension and continuous consumption of foods high in salt (e.g., canned and processed foods). Lastly, it is related to the high number of the residents who express interest in information about foods that can help manage diabetes as evidenced by 38% of aggregate having doctor-diagnosed diabetes and continuous consumption of foods made of simple sugars and high sugar content.

The ultimate goal is that the aggregate will report an increase in knowledge in balanced nutrition. One outcome for the aggregate is that 85% of the aggregate will verbalize three benefits of adopting a healthy eating pattern by the end of the teaching sessions carried out. Another is that 85% of the aggregate will list at least three dietary recommendations that can help manage hypertension and diabetes by the end of the teaching sessions carried out. A third outcome is that 80% of the aggregate will demonstrate appropriate selection of weekly meal

planning that incorporates at least five recommendations of healthy eating by the end of the teaching sessions carried out. Fourthly, 85% of the aggregate will describe three snacking habits/patterns, and emotions, that are detrimental to nutritional change by the end of the teaching sessions carried out. The final outcome is that 90% of the aggregate will identify at least three positive reinforcements to help them stick to dietary changes by the end of the teaching sessions carried out.

Interventions

In order to effectively enhance the nutrition of the aggregate at VP, residents require education on diet, healthy foods, and eating habits. An intervention to enhance knowledge includes bringing in a nutritionist or dietician as a guest speaker, which will allow the aggregate to receive teaching on benefits of healthy eating patterns and appropriate foods to eat as well as foods to avoid with hypertension and diabetes. This intervention will be effective in informing the aggregate about healthier eating habits that can be incorporated into their daily routine.

Additionally, interventions for enhanced nutrition include having a “recipe potluck” with the residents in which nursing students and residents bring a healthy dish to share as well as the recipe for those who want to learn to make it. During the potluck, nursing students will incorporate teaching regarding meal preparation and storage. Teaching will include how to prepare a meal that can be stored in containers and used throughout the week. This intervention will educate the aggregate and provide them with ways to maintain a healthy lifestyle that is cost effective as well as ways to prepare meals for the week. This intervention will increase the success of residents utilizing the knowledge gained.

According to the American Diabetic Association (ADA), people with diabetes need to follow a healthy meal plan that will not only improve blood glucose levels but also blood

pressure and cholesterol. An important aspect is that it should fit personal eating habits and schedules. One simple method is The Plate Method (creating proper portions of specific foods on one's plate), which includes starchy vegetables, non-starchy vegetables, and proteins. These three parts can be adjusted to food choices that the residents prefer, such as their favorite vegetable or protein, making this method more likely to be followed.

Teaching the aggregate about healthy snacking options is important to complement their daily diet. Snacks can assist in controlling hunger in-between meals and managing glucose levels, and it is common with a majority of individuals. Discussing different types of snacks that not only taste good but do not have overall negative effects on health (e.g., almonds, fruits, cheese sticks, rice cakes) will assist the residents in choosing healthier options to control hunger in-between meals.

Conclusion

Through surveys and open discussions, the aggregate at VP has provided valuable information on various health needs and concerns such as nutritional aspects for hypertension and diabetes (e.g., foods to eat, foods to avoid, and healthy recipes they can cook), physical activities, and pain management through complementary and alternative therapies. While all of these aspects will be incorporated into the interventions, the main focus will be on nutritional aspects with regards to diet and healthy foods that will assist in managing hypertension and diabetes. It is believed that due to the past relationships with VP residents and the therapeutic relationship established thus far, we will be able to provide the needed teaching to improve health status and overall quality of life.

References

Administration for Community Living. Administration on aging: A profile of older americans.

(2013). Washington, DC. Retrieved from

http://www.aoa.gov/Aging_Statistics/Profile/index.aspx. Accessed 10/15/2014.

Amer, R., Kolker, J., (2013). Restoration of root surface caries in vulnerable elderly patients: a review of the literature. *Special Care in Dentistry*. 33(3): 141-9.

Arthritis. (2013, July 18). Retrieved from

<http://www.cdc.gov/chronicdisease/resources/publications/aag/arthritis.htm> Accessed 10/15/2014.

Brinkman-Stoppelenburg, A., Rietjens, J., & van der Heide, A. (2014). The effects of advance care planning on end-of-life care: A systematic review. *Palliative Medicine*, 28(8), 1000-1025.

Brown, S.T., Kirkpatrick, M.K., Swanson, M.S., & McKenzie, I.L. (2011). Pain experience of the elderly. *Pain Management Nursing*, 12(4), 190-196. doi: 10.1016/j.pmn.2010.05.004

Carpenito, L. (2013). Nursing diagnosis: Application to clinical practice (14th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Curtis, J. R., & Safford, M. M. (2012). Management of osteoporosis among the elderly with other chronic medical conditions. *Drugs & Aging*, 29(7), 549-564. d
doi:10.2165/11599620-000000000-00000.

Hypertension in Virginia. Retrieved from

<http://www.vdh.virginia.gov/ofhs/prevention/collaborative/documents/2013/pdf/Hyperten-sion%20Burden%20Report%20.pdf>. Accessed 11/16/14.

Kamp, B., Wellman, N., Russell, C., (2010). Position of the american dietetic association, american society for nutrition, and society for nutrition education: Food and nutrition

- programs for community-residing older adults. *Journal of Nutrition Education and Behavior*. 42(2): 72-82.
- Lovell, A., & Yates, P. (2014). Advance care planning in palliative care: A systematic literature review of the contextual factors influencing its uptake 2008–2012. *Palliative Medicine*, 28(8), 1026-1035.
- Meiner, S. E. (2011). *Gerontologic nursing* (4th ed.). St. Louis, Mo.: Elsevier Mosby.
- Modig, S., Kristensson, J., Ekwall, A., Hallberg, I., & Midlöv, P. (2009). Frail elderly patients in primary care--their medication knowledge and beliefs about prescribed medicines. *European Journal Of Clinical Pharmacology*, 65(2), 151-155.
doi:10.1007/s00228-008-0581-8.
- Onat, S., Delialioglu, S., & Ucar, D. (2014). The risk of depression in elderly individuals, the factors which related to depression, the effect of depression to functional activity and quality of life. *Turkish Journal of Geriatrics*, 17(1), 35-43.
- Pew Research. Growing old in america: Expectations vs. reality. Washington, DC. Retrieved from <http://www.pewsocialtrends.org/2009/06/29/growing-old-in-america-expectations-vs-reality>. Accessed 10/15/2014.
- Pew Research. Older adults and technology use. Washington, DC. Retrieved from <http://www.pewinternet.org/2014/04/03/older-adults-and-technology-use>. Accessed 10/15/2014.
- Saengtipbovorn, S., Tannepanichskul, S., (2014). Effectiveness of lifestyle change plus dental care (LCDC) program on improving glycemic and periodontal status in the elderly with type 2 diabetes. *BioMed Central Oral Health*. 14(1): 1-18.
- Scarvell, J., & Elkins, M. (2011). Aerobic exercise is beneficial for people with rheumatoid

arthritis. *British Journal Of Sports Medicine*, 45(12), 1008-1009

State and County QuickFacts. Retrieved from <http://quickfacts.census.gov/qfd/index.html>.

Accessed 11/16/14.

Stewart, C., Leveille, S. G., Shmerling, R. H., Samelson, E. J., Bean, J. F., & Schofield, P.

(2012). Management of persistent pain in older adults: The MOBILIZE boston study.

Journal Of The American Geriatrics Society, 60(11), 2081-2086. doi:10.1111/j.1532-

5415.2012.04197.x

The Virginia Atlas of Community Health. Atlas data. HPD 20. Retrieved from

<http://atlasva.org/data>. Accessed 10/15/2014.

Appendix A

Demographics Survey

1. What is your gender?
 - a. Female
 - b. Male
2. What is your age? _____
3. What is your primary language? _____
4. What ethnicity do you classify with?
 - a. Asian/Pacific Islander
 - b. African American/Black
 - c. Caucasian/White
 - d. Hispanic
 - e. Latino
 - f. Multiracial
5. What is your highest level of education completed?
 - a. Middle School
 - b. High School
 - c. College
 - d. Postgraduate
6. What is your religious preference? _____
 - a. Do you attend a church?
 - i. Yes
 - ii. No
7. What is your total annual income before taxes?
 - a. More than \$20,000
 - b. \$10,000-20,000
 - c. Less than \$10,000
 - d. Would rather not say
8. What is your current marital status?
 - a. Divorced
 - b. Married
 - c. Separated
 - d. Single
 - e. Widowed
 - f. Would rather not say
9. What is your current living arrangement?
 - a. Live alone
 - b. Live with spouse
 - c. Live with dependent(s)
10. How long have you been a resident of Village Pointe/Village Gardens?

11. What is your means of transportation?
 - a. Personal transportation

- b. Facility transportation
 - c. Public transportation
12. Do you feel safe in the environment you are currently living in?
- a. Yes
 - b. No
13. Do you have family in the area?
- a. Yes
 - b. No
 - c. If yes, who? _____
14. How would you describe your relationship with family?
- a. Very close
 - b. Close
 - c. Somewhat close
 - d. Distant
 - e. Would rather not say
15. Do you have access to computer/internet?
- a. Yes
 - b. No
16. How often do you use computer/internet?
- a. 1-2 hours/week
 - b. 3-5 hours/week
 - c. 6-10 hours/week
 - d. More than 10 hours/week
 - e. None
17. Do you have a phone?
- a. Yes
 - b. No
 - c. If so, what type? _____

Appendix B

Health Survey

1. How would you evaluate your overall health?
 - a. In good physical health (no significant illnesses/disabilities; only routine check-ups)
 - b. Mildly physically impaired (minor illnesses/disabilities that may benefit from medical treatment)
 - c. Moderately physically impaired (one or more diseases/disabilities that are painful or require medical attention)
 - d. Severely physically impaired (one or more diseases/disabilities that are severely painful or life threatening and need substantial medical attention)
2. How would you evaluate the hospitals in the area in their ability to treat health problems related to age?
 - a. Excellent
 - b. Good
 - c. Fair
 - d. Poor
 - e. Not sure
3. How often do you go to the dentist for a regular check-up?
 - a. Never
 - b. Every 6 months
 - c. Every year
 - d. Every 2 or more years
4. What is the most common reason for **NOT** going to the dentist:
 - a. I go for regular check-ups
 - b. Transportation
 - c. Dental cost
 - d. Don't go on a regular basis
 - e. Nothing wrong with my teeth
 - f. Other _____
5. Are you taking any medications?
 - a. Yes
 - b. No
6. Do you know why you are taking each medication?
 - a. Yes
 - b. No
7. Do you know the names of each medication you are taking?
 - a. Yes
 - b. No
8. Do you experience chronic pain? (That is, ongoing or recurring pain)
 - a. Yes
 - b. No
9. If yes, how are you being treated for chronic pain?
 - a. No treatment

- b. Medication
 - c. Other _____
10. For pain management, would you be interested in alternative/complementary treatment methods (i.e. relaxation techniques, guided imagery, music therapy)?
- a. Yes
 - b. No
 - c. Not sure what alternative/complementary is
11. How often do you drink alcoholic beverages?
- a. Never
 - b. Less than monthly
 - c. Monthly
 - d. Weekly
 - e. Daily or almost daily
12. Do you smoke tobacco?
- a. Yes
 - b. No
13. If yes, have you participated in smoking cessation programs/treatments
- a. Yes
 - b. No
14. How often do you interact with other people?
- a. Daily
 - b. Several times a week
 - c. Weekly
 - d. A couple times per month
 - e. Monthly or less often
15. Are you familiar with advanced directives?
- a. Yes, and I have an advanced directive
 - b. Yes, but I do not have advanced directive
 - c. No, but I have an advanced directive
 - d. No, and I do not have an advanced directive
16. Can you get to places within walking distances
- a. Without help
 - b. With some help
 - c. Need special arrangements

Appendix C

Comparison of Health Status

	United States	Virginia	North Carolina	Maryland
Population in 2013	36,128,839	8,260,405	9,848,060	5,928,814
Under 5 (%)	6.3	6.2	6.2	6.2
Under 18 (%)	23.3	22.6	23.2	22.7
65 and older (%)	14.1	13.7	14.3	13.4

Number of Deaths in 2011		
	Hypertension	Diabetes Mellitus
United States	30,076	27,069
Virginia	546	543
North Carolina	671	802
Maryland	507	463

HONOR CODE

At time of enrollment, each student signs the honor pledge. The School of Nursing adheres to the University's Honor System as described in the University Catalog. Violations of the Honor Code include: Lying, cheating, plagiarism, and/or failure to report the same. Students and faculty are responsible for familiarizing themselves with Academic Dishonesty Procedures and reporting processes: http://orgs.odu.edu/hc/pages/Honor_Code.shtml. The pledge statement to be written out in full on each assignment turned in for credit (homework, quizzes, tests, papers, examinations, etc.) is:

—I pledge to support the Honor System of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the Honor Code. I will report to a hearing if summoned.

Name: Jessica Chamberlain, Cecile Perez-Collantes, Marian Gemender, Victoria Grigorita, Aubrey Hogge, Melissa Johnston, Laura Pozo, and Shannon Harris