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# HEALTH LITERACY ON HYPERTENSION AND FUNCTIONAL HEALTH STATUS AMONG ELDERLY OF MALABON CITY, PHILIPPINES 

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#### Abstract

Hypertension is an important risk factor for cardiovascular morbidity and mortality in the elderly. Utilizing cross-sectional research design, this study determined health literacy on hypertension and functional health status among elderly of Malabon City, Philippines. Findings revealed that a) majority of respondents were females, between 65-69 years old, received allowances from relatives, graduated elementary, lived with relatives, did not smoke nor drink alcohol, and hypertension, their most common existing disease; b) no difference existed in heath literacy among respondents when grouped according to age, gender economic support source, living status and co-morbidity); c) difference existed between health literacy and education, smoking and alcohol consumption; d) no difference existed between physical health status, living status ( $P=0.098$ ) and co-morbidity; e) difference existed between physical health status and age, gender, economic support source, education., smoking, and alcohol consumption; f) no difference existed between psychological health status and age, economic support source,


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educational, living status, smoking, alcohol consumption and co-morbidity; g) difference existed between psychological health status and gender; h) no difference existed in social/role health status when grouped according to gender, economic support source, smoking, alcohol consumption and co-morbidity; i) difference existed between social/role health status and age, education and living status; j) no relationship existed between health literacy and physical health status; k) no relationship existed between health literacy (Pearson r; lastly, l) no relationship existed between health literacy and social role. In conclusion, sociodemographic characteristics of the elderly do not impact on their knowledge about hypertension as well as on their physical, psychological and social functioning.

## Keywords

Health Literacy, Hypertension, Functional Health Status, Elderly, Health Centers

## 1. Introduction

### 1.1 Hypertension

Nguyen, Anderson, Sanders \& Nguyen, (2012) defined hypertension as blood pressure of $140 / 90 \mathrm{mmHg}$ or more affecting approximately $66 \%$ of the elderly population (aged $\geq 65$ years). Touted as a "silent killer", it usually occurs without any signs and symptoms, and many people do not realize they have it. Twum-Asante (2015) found that hypertension is linked with increasing age and estimated $32 \%$ of those aware of the disease. Based on the national survey released by the Philippine Department of Health in 2017, the total number of hypertensive Filipinos is now more than 12 million, with more than half of them are unaware of their condition. Roughly, that is one out of four to five Filipinos in general.

### 1.2 Health Literacy on Hypertension

According to Hameed, Kumar, Naik, Sachidananda \& Prasanna (2015), 93\% of the elderly population have one or more health-related complaints. The onset of chronic disease tends to increase with age and often require prolonged periods of treatment. In the Philippines, poverty and lack of education are considered to be the most contributing factors of limited health literacy. These gaps lead to ineffective communication within medical encounter, lack of understanding regarding health information and inability to make appropriate health decisions (Leachon, 2014). Leachon (2014) further said that aside from the effects of inadequate health literacy on the individual patient, there are economic consequences of low health literacy to the society. As cited by Lloyd-Sherlock, Beard, Minicuci, Ebrahim \& Chatterji (2013), the
prevalence of hypertension increases with age and has been identified as a controllable risk factor of morbidity and mortality among the elderly.

Moreover, according to Bostock \& Steptoe (2012), inadequate health literacy was also linked with a higher prevalence of depressive symptoms, physical limitations and chronic diseases, specifically heart disease, diabetes, asthma and stroke. Boston and Steptoe added that, health risk behaviors such as alcohol consumption, smoking and physical inactivity are also associated with low health literacy.

A number of studies have revealed that lifestyle modifications like physical activity and good and adequate nutrition) are crucial in controlling and preventing high blood pressure (Malik et al., 2014)., considered vital component in hypertension control (Twum-Asante, 2015) with medicines to prevent complications such as stroke (Marfo, Afia FA, Frances Owusu-Daaku, Mercy Opare Addo \& Ibrahin Saana (2014), and are the first treatment of hypertension.

### 1.3 Functional Health Status

Arifin and Hogervorst (2013) posited that maintaining a positive health status is imperative for an elderly to stay active in life for being physically active associates with higher quality of life. A study conducted among elderly by Taheri, Mohammadi, Paknia \& Mohammadbeigi (2013) found that a significant relationship existed between physical activity and high level of education. In order to better understand the health of the elderly Filipinos especially in Malabon City, it is necessary to assess their sociodemographic characteristics, health knowledge on hypertension and functional health status. This study yielded significant information about the elderly, along with the people involved in providing healthcare in the community, and increasingly motivate and understand that health literacy and functional health status are needed in order to appreciate the full picture regarding the health of an individual. As there was a scarcity of literature that assessed health literacy on hypertension and the functional heath status of the elderly in the Philippines particularly in the city of Malabon, this study is timely and deserves attention.

### 1.4 Objectives of the Study

The study aims to

1) Find out if there is a significant difference in the heath literacy and functional health status among the elderly when grouped according to their profile, and
2) Determine if a relationship exists between health literacy and functional health status of the respondents.

### 1.5 Theoretical Framework

The study is theoretically anchored on the self-care deficit nursing theory of Dorothea Orem, to show the relevance of one's self-care and responsibility for his/her own care and others in their family needing care, and the actions performed by nurses to help individuals maintain a state of health. In this theory, human is viewed as a distinct individual and one's knowledge of potential health problems is necessary for promoting self-care behaviors. Health is defined as "being structurally and functionally whole or sound. Also, health is a state that encompasses both the health of individuals and of groups, and human health is the ability to reflect on one's self, to symbolize experience and to communicate with others.

The self-care deficit nursing theory is composed of three interrelated theories: (1) the theory of self-care, the activities of daily living that an individual performs on his/her own behalf in maintaining life, health and well-being; (2) the theory of self-care deficit, specifies when nursing is needed; and (3) the theory of nursing system, which describes and explains the relationships that must be brought about and maintained for nursing to be produced. Orem's theory delineates the importance of meeting the self-care requisites in order to stay healthy or get better from illness.

## 2. Methodology

### 2.1 Research Design

The descriptive-correlational and descriptive-comparative research designs were used respectively to explore the relationship between health literacy and functional health status and tried to find out if there is a significant difference in health literacy when grouped according to respondents' profile.

### 2.2 Sampling

The study conducted in 21 barangays of Malabon City in the Philippines where 292 respondents constituted the sample size through a convenience sampling technique. .

### 2.3 Measurement of Variables

Three sets of variables were identified in the study. These are variables pertaining to characteristics of the elderly respondents namely age, gender, economic support source, educational attainment, living status, health risk behaviors and co-morbidity; the second set includes the health literacy of respondents, and the third set, the functional health status of the respondents including physical, psychological and social/role functions.

The study used the questionnaire adopted from Cleary and Jette's "The Functional Status Questionnaire: Reliability and Validity When Used in Primary Care, in 1986." (Cleary and Jette, 2015) The questionnaire had three parts; the first asked about respondents' personal characteristics; second part assessed respondents' health literacy on hypertension. Total number of correct answers was twelve and scores ranging from 1-3 were considered very low knowledge; 4-6 low knowledge; 7-9 high knowledge; and 10-12 very high knowledge. Third part, related to functional health status categorized into three domains namely physical, psychological and social/role functions. The physical function domain was classified into basic, immediate and intermediate activities of daily living (ADL).

The activities of daily living had three items and were measured using a four-point Likert scale where $\mathbf{4}$ - was without difficulty; $\mathbf{3}$ - with some difficulty; $\mathbf{2}$ - with much difficulty; and $\mathbf{1}$ - usually did not do because of certain illness. While the intermediate ADL had six items and each item was measured using a four-point Likert scale similar with activities of daily living. Another domain under functional health status, psychological function, had five items and was measured using a six-point Likert scale where $\boldsymbol{6}$ - all of the time; $\mathbf{5}$ - most of the time; $\mathbf{4}$ - a good bit of a time; 3 - some of the time; 2 - a little of the time; and $\boldsymbol{1}$ - none of the time. Finally, domain under functional health status, the social / role function had nine items and was measured using the six-point Likert scale.

### 2.4 Instrument Validation and Reliability

The questionnaire underwent validation by experts then pilot-tested on 10 elderly living in a barangay who were not part of the study. Cronbach's alpha correlation coefficient to test for the reliability of the instrument yielded 0.812 , indicating that the items had relatively high internal consistency. The questionnaire was translated and back-translated by faculty who had the communicative competence both in English and Filipino (the main languages of most Filipinos).

### 2.5 Ethics

Research and Development and Innovation Center of the Our Lady of Fatima University Philippines provided the review clearance prior to data gathering. Informed consent was also obtained from the chairmen, and participating elderly of the barangays under study. When the research was approved by concerned parties to undertake the study, questionnaires were distributed to respondents who were encouraged to ask questions for any ambiguous item. Non-reader-participants were assisted by the researcher by reading the questionnaires for them, and in
writing their answers on the questionnaire. The researcher ensured that questionnaires were fully understood by the participants and were answered accordingly in spite of some who had difficulty reading. Collection, collation, analysis and interpretation of the data followed later using appropriate statistical tests.

### 2.6 Statistical Treatment of Data

Frequency and percentage distribution was used to analyze and interpret profile of the respondents. Weighted mean and standard deviation were used to analyze and interpret the functional health literacy. Weighted mean and standard deviation were used in computing for the functional health status. Chi-square test of Goodness Fit was used to find out if there were significant differences in the functional health status of the respondents when grouped according to their profile,. To analyze if there were significant differences in the functional health status and health literacy of the respondents, Kruskal Wallis was used. To determine if there was a significant relationship between health literacy and functional health status, Spearman rank was used.

## 3. Analysis and Interpretation of Data

### 3.1 Demographic Profile

As table 1 shows, ages range from 65-69 years old had the biggest number of respondents ( 97 or $33.2 \%$ ) with the least coming from 90-94 age bracket.

Table 1: Age of Respondents

| Age | Frequency | Percentage |
| :--- | :--- | :--- |
| $60-64$ | 63 | 21.6 |
| $65-69$ | 97 | 33.2 |
| $70-74$ | 63 | 21.6 |
| $75-79$ | 33 | 11.3 |
| $80-84$ | 30 | 10.3 |
| $85-89$ | 5 | 1.7 |
| $90-94$ | 1 | 0.3 |
| Total | $\mathbf{2 9 2}$ | $\mathbf{1 0 0}$ |

Table 2 data revealed that most of the respondents were females constituting $84.9 \%$ as against the male counterpart (15.1\%).

Table 2: Gender

| Gender | Frequency | Percentage |
| :--- | :--- | :--- |
| Male | 44 | 15.1 |
| Female | 248 | 84.9 |
| Total | $\mathbf{2 9 2}$ | $\mathbf{1 0 0}$ |

Data on Table 3 show that $53.3 \%$ received their allowances from their relatives while only $3.8 \%$ come from other sources. This finding is expected because Filipino families are closely-knit and whenever possible, caring for elderly at home is prevalent.

Table 3: Socio-Economic Support

| Source of Economic Support | Frequency | Percentage |
| :--- | :--- | :--- |
| Pension | 114 | 29.1 |
| Income | 54 | 13.8 |
| Allowances from Relatives | 209 | 53.3 |
| Others | 15 | 3.8 |
| Total | $\mathbf{3 9 2}$ | $\mathbf{1 0 0}$ |

Table 4 shows that most ( $25 \%$ ) of the respondents were elementary graduates $23.3 \%$ were high school graduates, elementary undergraduates and high school graduates both have $16.4 \%$; $11 \%$ were college undergraduates and only $7.9 \%$ were college graduates. This is probably due to the fact that most elderly came from poor families and they had no chance of attaining college education event if they were so eager to have it.

Table 4: Highest Educational Attainment

| Highest Educational Attainment | Frequency | Percentage |
| :--- | :--- | :--- |
| Elementary Undergraduate | 48 | 16.4 |
| Elementary Graduate | 73 | 25.0 |
| High School Undergraduate | 48 | 16.4 |
| High School Graduate | 68 | 23.3 |
| College Undergraduate | 32 | 11.0 |
| College Graduate | 23 | 7.9 |
| Total | 292 | 100 |

As gleaned in Table 5, $79.5 \%$ of the elderly lived with their family members, $8.6 \%$ lived alone, $6.8 \%$ others, while the least with $5.1 \%$ lived only with spouse. It implies the closely knit culture of the Filipino families as they could not afford to have their parents or grandparents to be away from them.

Table 5: Living Status

| Living Status | Frequency | Percentage |
| :--- | :--- | :--- |
| Living with Family Members | 232 | 79.5 |
| Living Alone | 25 | 8.6 |
| Living Only with Spouse | 15 | 5.1 |
| Others | 20 | 6.8 |
| Total | 292 | 100 |

As gleaned in Table 6, elderly who do not smoke comprised $92.1 \%$ and $88.4 \%$ do not drink alcohol. This data suggests that the elderly have the desire to maintain and promote health even in their twilight stage. As majority of them are aware that they have other health problems aside from hypertension it was imperative for them to take good care of their health by avoiding the deleterious effects of smoking and alcohol.

Table 6: Health Risk Behaviors

| Health Risk Behaviors | Frequency | Percentage |
| :--- | :--- | :--- |
| Smoking: |  |  |
| Less than 1 Pack/Day | 22 | 7.5 |
| More than 1 Pack/Day | 1 | 0.3 |
| Do not Smoke | 269 | 92.1 |
| Alcohol Consumption: |  |  |
| 1 Bottle / day | 4 | 1.4 |
| Less than 5 bottles / week | 21 | 7.2 |
| More than 5 bottles / week | 9 | 3.1 |
| Do not drink alcohol | 258 | 88.4 |
| Total | 292 | 100 |

Table 7 data reveals that elderly aside from having hypertension (53.8\%) had also arthritis, comprising about 190 (or $31.8 \%$ ) and cardiovascular disease ( $13.5 \%$ and diabetes ( $10.7 \%$ ), although a neglible few ( $0.2 \%$ ) had cancer. The data indicates that as one goes through the aging process, body cells degenerate and the body suffers from the presence of multiple stressors in the environment that can lead to development of an illness. However, despite the
presence of a secondary illness, yet the elderly are still capable of caring for themselves. The above data supports the study of Hameed, Kumar, Naik, Sachidananda \& Prasanna (2015), that claimed $93 \%$ of the elderly population have one or more health-related complaints.

Table 7: Co-Morbidity

| Co-Morbidity | Frequency | Percentage |
| :--- | :--- | :--- |
| Hypertension | 214 | 35.8 |
| Diabetes | 64 | 10.7 |
| Arthritis | 190 | 31.8 |
| Cancer | 1 | 0.2 |
| Cardiovascular Disease | 81 | 13.5 |
| Others | 48 | 8.0 |
| Total | 598 | 100 |

### 3.2 Health Literacy on Hypertension among Respondents

Table 8 shows that despite the educational attainment of the elderly, they possess high knowledge about hypertension. This is probably due to the fact that a great proportion of them do miss consulting with their doctors, nurses and other health care providers who give them health education, and are eager to know more about their condition. This is contrary to Leachon's (2014) observation that lack of education in the Philippines coupled with poverty contributes mostly to limited health literacy, thus making them unable to make decisions affecting their health status.

Table 8: Respondents' Status of Literacy on Hypertension

| Item | Frequency | Percentage | Rank |
| :--- | :---: | :---: | :---: |
| 1. Lower than 120/80 mmg is the most desirable blood <br> pressure reading. | 184 | 8.1 | 7.5 |
| 2. Eating a healthy diet can help reduce the risk of <br> developing health problems, such as some forms of cancer, <br> high blood pressure, and heart and respiratory disease. | 159 | 7.0 | 9 |
| 3. High blood pressure medication is usually prescribed to be <br> taken as a lifelong way to manage high blood pressure. | 184 | 8.1 | 7.5 |
| 4. Blood pressure changes throughout the day. When you are <br> active, it's normal for your blood pressure to increase. | 128 | 5.6 | 10 |
| 5. If not treated, high blood pressure can lead to stroke, <br> kidney failure, heart attack and heart failure. | 96 | 4.2 | 11 |
| 6. High blood pressure can be caused by lifestyle habits such <br> as smoking, drinking too much alcohol, and physical <br> inactivity. | 261 | 11.5 | 2 |


| 7. Cutting back on salt in your diet can help lower your <br> blood pressure. You can do this by eating less canned food. | 258 | 11.3 | 3.5 |
| :--- | :---: | :---: | :---: |
| 8. High blood pressure has no common symptom. | 28 | 1.2 | 12 |
| 9. Treatment for high blood pressure typically lasts for lifetime | 220 | 9.7 | 5 |
| 10. Many people get high blood pressure as they age | 258 | 11.3 | 3.5 |
| 11. I feel healthy so it isn't important to schedule a regular <br> checkup with my doctor. True | 208 | 9.1 | 6 |
| 12. Walking at least 15 minutes a day can help boost my mood? <br> True. | 292 | 12.8 | 1 |
| Total | $\mathbf{2 2 7 6}$ |  |  |

Table 9 shows that overall assessment of health literacy on hypertension among the elderly with 53.4 \% of them having high knowledge regarding hypertension, and that only a few ( $22.6 \%$ ) were less knowledgeable. This suggests that respondents' profile do not impact on their knowledge about hypertension.

Table 9: Respondents' Status of Health Literacy on Hypertension

| Knowledge on Hypertension | Frequency | Percentage | Rank |
| :--- | :---: | :---: | :---: |
| Very high knowledge <br> (Range 10-12) | 66 | 22.6 | 2.5 |
| High knowledge <br> (Range 7-9) | 156 | 53.4 | 1 |
| Low knowledge <br> (Range 4-6) | 66 | 22.6 | 2.5 |
| Very low knowledge <br> (Range 1-3) | 4 | 1.4 | 4 |
|  | 292 | 100.0 |  |

### 3.3 Functional Health Status

Table 10 data presents the functional health status related to physical function of the the elderly. In the both the basic and intermediate activities of daily living, elderly were assessed to have some some difficulty (with average means of 3.47 and 2.88 , respectively) in the performance of the activities of daily living. Overall, combining the results both the basic and immediate activities of daily living, with a grand mean of 3.17 , the elderly can be said to have some difficulty in the activities of daily living.

### 3.4 Functional Health Status

Table 10: Respondents' Physical Functional Health Status

| Physical Function | Weighted <br> Mean | Qualitative <br> Description | SD |
| :---: | :---: | :---: | :---: |
| Basic Activity of Daily Living (ADL) |  |  |  |
| 1. I have difficulty with taking care of myself. | 3.63 | Without difficulty | 0.60 |
| 2. I have difficulty moving in or out of bed. | 3.47 | With some difficulty | 2.36 |
| 3. I have difficulty walking indoors, such as around my home. | 3.32 | With some difficulty | 0.68 |
| Average WM | 3.47 | With some difficulty | 1.21 |
| Intermediate Activity of Daily Living (IDL) |  |  |  |
| 1. I have difficulty with walking several blocks. | 3.35 | With some difficulty | 0.66 |
| 2. I have difficulty with walking one block or climbing one flight of stairs. | 2.92 | With some difficulty | 0.77 |
| 3. I have difficulty doing work around the house, such as cleaning, light yard work, or home maintenance. | 3.37 | With some difficulty | 0.66 |
| 4. I have difficulty walking errands such as grocery shopping. | 3.14 | With some difficulty | 0.75 |
| 5. I have difficulty driving a car or using a public transportation. | 2.93 | With some difficulty | 0.74 |
| 6. I have difficulty doing vigorous activities such as running, lifting heavy objects or participating in strenuous sports. | 1.53 | With much difficulty | 0.71 |
|  | 2.88 | With some | 0.72 |


| Average WM |  | difficulty |  |
| :--- | :--- | :--- | :--- |
| Grand WM | 3.17 | With some <br> difficulty | 0.96 |

Legend: 1.00-1.49 Usually did not do because of certain illness, 1.50-2.49 With much difficulty, 2.50-3.49 With some difficulty, 3.50-4.00 Without difficulty

### 3.5 Respondents' Psychological Functional Health Status

The assessment on the psychological health status of the respondents shown in Table 11 revealed an average mean of 3.07 interpreted as some of the time indicating that they are not too much happy and this might affect the way they perform in the society physically, psychologically and socially.

Table 11: Respondents' Psychological Functional Health Status

| Psychological Function | Weighted Mean | Qualitative <br> Description | Standard <br> Deviation |
| :--- | :--- | :--- | :--- |
| 1. Have you been a very nervous <br> person? | 2.93 | Some of the time | 1.04 |
| 2. Have you felt calm and peaceful? | 3.46 | Some of the time | 1.05 |
| 3. Have you felt downhearted and <br> blue? | 2.90 | Some of the time | 0.84 |
| 4. Were you a happy person? | 4.13 | A good bit of a <br> time | 1.14 |
| 5. Do you feel so down in the dumps <br> that nothing could cheer you up? | 1.96 | A little of the time | 0.96 |
| Average WM | 3.07 | Some of the time | 1.01 |

Legend: 1.00-1.49 -None of the time, 1.50-2.49 A little of the time, 2.50-3.49 Some of the time, 3.50-4.49 A good bit of a time, 4.5-5.49 Most of the time, 5.5-6 All of the time

### 3.6 Respondents' Social Role Functional Health Status

Table 12 showed that the social role functional health status had an average weighted mean of 2.52 indicating that the elderly performed the activities with some difficulty. Orem's theory, (2002) states that whenever there is an inadequacy of self-care requisite (such as activity/rest, social interaction etc.), the person needs assistance from significant person to
regain his health and promote a sense of well-being, and the expectation is that the elderly will be able to perform later on by himself.

Table 12: Respondents' Social Role Functional Health Status

| Social/Role Function | Weighted <br> Mean | Qualitative <br> Description | Standard <br> Deviation |
| :--- | :--- | :--- | :--- |
| 1. Had difficulty visiting with friends or <br> relatives? | 2.14 | With much <br> difficulty | 0.87 |
| 2. Had difficulty participating in community <br> activities, such as religious services, social <br> activities, or volunteer work? | 1.95 | With much <br> difficulty | 0.83 |
| 3. Had difficulty taking care of others such as <br> family members? | 2.10 | With much <br> difficulty | 0.88 |
| 4. Done as much work as others in similar <br> jobs? | 3.50 | Without <br> difficulty | 0.64 |
| 5. Worked for short periods of time or taken <br> frequent rests because of your health? | 1.96 | With much <br> difficulty | 0.63 |
| 6. Worked your regular number of hours? | 3.69 | Without <br> difficulty | 0.51 |
| 7. Done your job as carefully and accurately <br> as others with similar jobs? | 3.94 | Without <br> difficulty | 0.24 |
| 8. Worked at your usual job, but with some | 2.00 | With much <br> difficulty <br> changes because of your health? | 0.52 |
| 9. Feared losing your job because of your |  |  |  |
| health? | 2.52 | Usually did not <br> do because of <br> certain illness | 0.60 |
| Average WM | With some <br> difficulty | 0.63 |  |

Legend: 1.00-1.49 Usually did not do because of certain illness, 1.50-2.49 With much difficulty, 2.50-3.49 With some difficulty, 3.50-4.00 Without difficulty

### 3.7 Comparison of Respondents' Heath Literacy on Hypertension when Grouped According to their Profile

On the comparison of heath literacy on hypertension when grouped according to profile, the computed P -values for age $(\mathrm{P}=0.918)$, gender ( $\mathrm{P}=0.209$ ), source of economic support
( $\mathrm{P}=0.941$ ), living status ( $\mathrm{P}=0.990$ ) and co-morbidity ( $\mathrm{P}=0.543$ ) are greater than 0.05 level of significance, thus the null hypothesis is accepted. Therefore, there is no significant difference in the heath literacy among respondents when grouped according to age, gender, source of economic support, living status and co-morbidity. Bostock \& Steptoe (2012) stated that despite education, an individual's health literacy may decrease as part of general decline in cognitive capabilities with age. On the other hand, since the computed P -values for highest educational attainment $(\mathrm{P}=0.000)$, health risk behavior as to smoking ( $\mathrm{P}=0.000$ ) and alcohol consumption $(\mathrm{P}=0.005)$ is less than 0.05 level of significance, thus the null hypothesis is rejected. Therefore, there is a significant difference in the health literacy among respondents when grouped according to highest educational attainment, health risk behavior as to smoking and alcohol consumption. With this result it is implied that the respondents' health literacy on hypertension differs depending on their educational attainment and health risk behaviors. This is consistent with Bostock \& Steptoe's (2012) study that said that harmful lifestyle and fewer education were predictors of inadequate health literacy and increased mortality.

Table 13: Comparison of Respondents' Health Literacy on Hypertension when Grouped According to their Profile

| Profile | Health Literacy in Hypertension |  |  |
| :--- | :--- | :--- | :--- |
|  | P-Values | Decision | Remarks |
| Age | 0.918 | Accept Ho | Not Significant |
| Gender | 0.209 | Accept Ho | Not Significant |
| Source of Economic Support | 0.941 | Accept Ho | Not Significant |
| Highest Educational Attainment | 0.000 | Reject Ho | Significant |
| Living Status | 0.990 | Accept Ho | Not Significant |
| Health Risk Behaviors |  |  |  |
| Smoking | 0.000 | Reject Ho | Significant |
| Alcohol Consumption | 0.005 | Reject Ho | Significant |
| Co-Morbidity | 0.543 | Accept Ho | Not Significant |
| Significant at P<0.05 |  |  |  |

Table 14 data shows that since the computed P -values for age ( $\mathrm{P}=0.000$ ), gender ( $\mathrm{P}=0.000$ ), source of economic support $(\mathrm{P}=0.000)$, highest educational attainment ( $\mathrm{P}=0.022$ ), health risk behaviors as to smoking $(\mathrm{P}=0.022)$ and alcohol consumption $(\mathrm{P}=0.026)$ are less than 0.05 level of significance, thus the null hypothesis is rejected. Therefore, there is a significant difference in the physical functional health status of the respondents' when age, gender, source of economic support, highest educational attainment, health risk behaviors as to smoking and alcohol consumption are considered. This affirms the study of Bostock \& Steptoe (2012) which said, age, gender, limited activities of daily living and health risk behaviors are important factors to mortality. The study also concurs with Taheri, Mohammadi, Paknia \& Mohammadbeigi's study (2013) which found that a significant relationship existed between physical activity and high level of education. Similarly, with reference to living status and co-morbidity, Table 14 shows that since the computed P -values for living Status $(\mathrm{P}=0.098)$ and co-morbidity $(\mathrm{P}=0.180)$ are greater than 0.05 level of significance, the null hypothesis is accepted. Hence, there is no significant difference in the physical functional health status of the respondents when living status and co-morbidity are considered. This affirms the study of Doumit, Nasser \& Hanna (2014) which stated that there was no significant difference between health status and comorbidity among nursing home residents in Lebanon.

Table 14: Comparison of Respondents' Physical Functional Health Status when Grouped According to their Profile

| Profile | Physical Function |  |  |
| :--- | :--- | :--- | :--- |
|  | P-Values | Decision | Remark |
| Age | 0.000 | Reject Ho | Significant |
| Gender | 0.000 | Reject Ho | Significant |
| Source of Economic Support | 0.000 | Reject Ho | Significant |
| Highest Educational Attainment | 0.022 | Reject Ho | Significant |
| Living status | 0.098 | Accept Ho | Not Significant |
| Health Risk Behaviors |  |  |  |
| Smoking | 0.022 | Reject Ho | Significant |
| Alcohol Consumption | 0.026 | Reject Ho | Significant |


| Co- Morbidity | 0.180 | Accept Ho | Not Significant |
| :--- | :--- | :--- | :--- |
| Significant at $P<0.05$ |  |  |  |

### 3.8 Comparison of Respondents' Psychological Functional Health Status when Grouped According to their Profile

Data on table 15 regarding the comparison of respondents' psychological functional health status when grouped according to profile shows that since the computed P -value for age ( $\mathrm{P}=0.114$ ), source of economic support ( $\mathrm{P}=0.845$ ), highest educational attainment $(\mathrm{P}=0.874)$, highest educational attainment $(\mathrm{P}=0.874)$, living status ( $\mathrm{P}=0.366$ ), health risk behaviors as to smoking ( $\mathrm{P}=0.278$ ), alcohol consumption $(\mathrm{P}=0.774)$ and co-morbidity are greater than 0.05 alpha level, the null hypothesis is accepted. Therefore, there is no significant difference in the psychological functional health status when age, source of economic support, highest educational attainment, living status, health risk behaviors as smoking and alcohol consumption, and comorbidity are considered.

However, as gleaned in the same table, because the computed P-value for gender $(\mathrm{P}=0.041)$ is less than 0.05 alpha level, the null hypothesis is rejected. Therefore, there is a significant difference in the psychological functional health status of the respondents when gender is considered. From the results, it can be deduced that the male psychological health status is different from female psychological health status. This confirms with the study of Thi Ha et al. (2014) that gender was associated with psychological health. Men who were married, attained higher education, had physical activities at a moderate level were positively associated with quality of life.
Table 15: Comparison of Respondents' Psychological Functional Health Status when Grouped According to their Profile

| Profile | Psychological Function |  |  |
| :--- | :--- | :--- | :--- |
|  | P-Values | Decision | Remark |
| Age | 0.114 | Accept Ho | Not Signifcant |
| Gender | 0.041 | Reject Ho | Significant |
| Source of Economic Support | 0.845 | Accept Ho | Not Signifcant |

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| Highest Educational Attainment | 0.874 | Accept Ho | Not Signifcant |
| :--- | :--- | :--- | :--- |
| Living Status | 0.366 | Accept Ho | Not Signifcant |
| Health Risk Behaviors |  |  |  |
| Smoking | 0.278 | Accept Ho | Not Signifcant |
| Alcohol Consumption | 0.774 | Accept Ho | Not Signifcant |
| Co-Morbidity | 0.360 | Accept Ho | Not Signifcant |

Significant at $P<0.05$

### 3.9 Comparison of Respondents' Social/Role Functional Health Status When Grouped According to their Profile

As gleaned in Table 16 that since the computed P -values for gender $(\mathrm{P}=0.223)$, source of economic support ( $\mathrm{P}=0.220$ ), health risk behaviors as to smoking ( $\mathrm{P}=0.112$ ), alcohol consumption ( $\mathrm{P}=0.689$ ) and co-morbidity $(\mathrm{P}=0.498)$ are greater than 0.05 alpha level, the null hypothesis is accepted. Therefore, no significant difference in the social/role functional health status of the respondents exists when gender, source of economic support, health risk behaviors as to smoking, alcohol consumption and co-morbidity are taken into account. From the results, it can be deduced that the respondents were still able to perform their role in society regardless of the above mentioned variables. On the other hand, since the computed P -values for age $(\mathrm{P}=0.004)$, highest educational attainment $(\mathrm{P}=0.022)$ and living status $(\mathrm{P}=0.027)$ are less than 0.05 alpha level, the null hypothesis is rejected. Therefore, no significant difference in the social/role functional health status of the respondents exists between age, highest educational attainment and living status. With the results it can be deduced that respondents' age, highest educational attainment and living status are important factors in performing their social/role function. This finding agrees with Kobayashi, Wardle, Wolf \& Wagner's study (2014) who found that, as people grow old, they start to have difficulty doing the activities of daily living and risks of health outcome begin to increase.

Table 16: Comparison of Respondents' Social/Role Functional Health Status when Grouped According to their Profile

| Profile | Social/Role Function |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
|  | P-Values | Decision | Remark |  |

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| Age | 0.004 | Reject Ho | Significant |
| :--- | :--- | :--- | :--- |
| Gender | 0.223 | Accept Ho | Not Signifcant |
| Source of Economic Support | 0.220 | Accept Ho | Not Signifcant |
| Highest Educational Attainment | 0.022 | Reject Ho | Significant |
| Living Status | 0.027 | Reject Ho | Significant |
| Health Risk Behaviors | 0.122 | Accept Ho | Not Signifcant |
| Smoking | 0.689 | Accept Ho | Not Signifcant |
| Alcohol Consumption | 0.498 | Accept Ho | Not Signifcant |
| Co-Morbidity |  |  |  |
| Significant at P<0.05 |  |  |  |

### 3.10 Relationship between Health Literacy and Functional Health Status

Data in Table 17 revealed that the obtained Pearson $r$ value of 0.078 with a qualitative description of "negligible relationship" shows no significance, since the computed P-value of 0.187 is greater than 0.05 alpha level. Therefore, no significant relationship exists between health literacy and physical functional health status of the respondents. Hence, it can be implied that knowledge and awareness of the elderly about health matters do not simply connote the ability to function physically well in all activities of daily living. Similarly, regarding psychological function, results revealed that the obtained Pearson $r$ value of -0.032 with qualitative description of "negligible relationship" is proven to be not significant, since the computed P-value of 0.587 is greater than 0.05 alpha level. Therefore, no significant relationship exists between health literacy and psychological functional health status. This therefore, implies that no matter how well-informed and knowledgeable an elderly is with respect to caring for his/her health, this will not alter his/her psychological functioning. Regarding social/role function, results revealed that the obtained Pearson $r$ value of -0.044 with qualitative description of "negligible relationship" is shows no significance, since the computed P-value of 0.458 is greater than 0.05 alpha level, Therefore, there is no significant relationship between health literacy and social/role functional health status of the respondents, which means the level of health literacy of the elderly does not affect his/her social/role functioning.

Table 17: Relationship between Health Literacy and Functional Health Status

|  | Health Lit | acy in Hype | on |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Functional Health Status | Pearson r | Qualitative <br> Description | P- <br> Values | Decision | Remark |
| Physical Function | 0.078 | NegR | 0.187 | Accept Ho | Not Significant |
| Psychological Function | -0.032 | NegR | 0.587 | Accept Ho | Not Signifcant |
| Social/Role Function | -0.044 | NegR | 0.458 | Accept <br> Ho | Not Signifcant |
| Legend: $\pm 1.00$ Perfect Relationship (PR), $\pm 0.91- \pm 0.99$ Very High Relationship (VHR), $\pm 0.71$ $\pm 0.90$ High Relationship (HR), $\pm 0.41- \pm 0.70$ Moderate Relationship (MR), $\pm 0.21- \pm 0.40$ Low Relationship (LR), $\pm 0.01- \pm 0.20$ Negligible Relationship (NegR), 0 No Relationship (NR) |  |  |  |  |  |

*Significant at $P<0.05$

## 4. Conclusion

The findings of the study suggest that sociodemographic characteristics of the elderly do not significantly influence their knowledge about hypertension as well as their functional health status.

## References

Arifin, E. \& Hogervorst, E. (2013). Eldelry's self-rated health status and functional capacity in decentralizing Indonesia. Journal of Population Ageing, vol. 8, p. 147, https://www.semanticscholar.org/paper/Elderly-s-Self-Rated-Health--Status-and-Functional-Arifin_Hogervorst/fae9254123e96f586ee2a64f3b6ca7e24155b9b

Borstock, S., \& Steptoe, A. (2012). Association between low functional health literacy and mortality in older adults: longitudinal cohort study. The BMJ, 2012;344:e1602 https://doi.org/10.1136/bmj.e1602

Cleary, Paul \& Jette, Alan (2015). "The Functional Status Questionnaire : Reliability and Validity When Used in Primary Care in 1986" available at https://www.researchgate.net/publication/1282092480_The Functional_StatusQuestionnaire_reliability_and_ validity_when _used_in_primary_care
Department of Health (2017). Philippine national survey on Hypertension, 2017
George, J. (200). Nursing theories: The base for professional nursing practice. New Jersey, NJ: Pearson https://iucat.iu.edu/iuk18906125
Hammed, S., Kumar, N., Naik, P., K. Sachidananda., \& K. Prasanna. (2015). Morbidity pattern among the elderly population in a rural of Dakshina Kannada, Karnataka- a cross sectional study. National Journal of Community Medicine, 6(2), 89-92.

Leachon, Anthony (2014). Dr. Anthony Preventive Health, Sin Tax Bill Advocate and Medical Practitioner by Heart." https://www.executivechronicles.com/dr.anthony-tony-leachon-preventive-health-sin-tax-bill-advocate-andmedical-practitioner-by-heart/

Lloyd-Sherlock, Beard, Minicuci, Ebrahim \& Chatterji (2013)
Marfo, Afia FA, Frances Owusu-Daaku, Mercy Opare Addo \& Ibrahin Saana (2014), Ghanaan Hypertensive Patients' Understanding of their Medicines and Lifestyle Modification for Managing Hypertension, International Journal of Pharmacy and Pharmaceutical Sciences ISSN- 0975-1491 Vol 6, Issue 4, 2014

Nguyen, Anderson, Sanders \& Nguyen (2012). Managing hypertension in the elderly: a common chronic disease with increasing age, American Health Drug Benefits, 2012 May;5(3):146-53. https://www.ncbi.nlm.nih.gov/pubmed/24991317

Magid Taheri, Mehri Mohammadi, Babaka Paknia \& A. Mohammadbeigi ( 2013). Elderly Awareness on Healthy Lifestyle During Aging. https://www.longdom.org/abstract/elderly-awareness-healthy-;ifestyle-during aging-8289 html

Twum-Asante (2015) Maxwell Twum-Asante. Hypertension Knowledge among Adult AfricanAmericans in the Cape Fear Region of North Carolina. American Journal of Hypertension Research. Vol. 3, No. 1, 2015, pp 1-10. http://pubs.sciepub.com/ajhr/3/1/1

