PERCEIVED WARNING SIGNS OF CEREBROVASCULAR DISEASE AND SELF-MANAGEMENT BEHAVIORS AMONG OLDER ADULTS WITH UNCONTROLLED HYPERTENSION DISEASE IN SRINARONG HOSPITAL, SRINARONG DISTRICT, SURIN PROVINCE

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Abstract

The purpose of descriptive research aimed to study perceived warning signs of cerebrovascular disease and self-management behaviors among older adults with uncontrolled hypertension disease in Srinarong Hospital, Srinarong District, Surin Province. The sample group consisted of 90 older adults with uncontrolled hypertension disease were randomly selected by simple random sampling without replacement. The collecting of data had been done during October 2016 to December 2016. The research tool included 1) The perceived warning signs of cerebrovascular disease interview form 2) The self-management behaviors for older adults with uncontrolled Hypertension disease questionnaire and tested for reliability using Cronbach’s alpha coefficient was 0.81 and 0.80 respectively. Descriptive statistics were used for data analysis including frequency, percentage, mean and standard deviation.

The results of the study showed that: 1) Overall perceived warning signs of cerebrovascular disease among older adults with uncontrolled hypertension disease were at the high level (M = 1.57, S.D. = 0.68) 2) Overall self-management behaviors among older adults with uncontrolled hypertension disease were at the high level (M = 3.56, S.D. = 0.59) and self-management behaviors in each aspect were at the high level included 2.1) roles management behavior (M = 3.73, S.D. = 0.57) 2.2) medical management behavior (M = 3.47, S.D. = 0.65) and 2.3) emotion management behavior (M = 3.47, S.D. = 0.55).

The finding of the study suggests the health care providers should follow up the older adults with hypertension disease who had perceived warning signs of cerebrovascular disease of the sample was at the moderate level because they were the group of high risk to cerebrovascular disease. There should be the activities to exchange the experience and learning together between the patients who had a moderate and high level of self-management behaviors. Proactive services to develop the health promotion self-management behaviors consistent with the lifestyle of the older adult.

Keywords: Perceived warning signs, Cerebrovascular disease, Self-management behaviors, Uncontrolled Hypertension disease

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Introduction

World Health Organization (2016) reports that current hypertension is the leading cause of death worldwide, reaching 7.50 million people, or about 12.80 percent of all deaths. The latest survey released by the Ministry of Public Health revealed that in 2014, Thailand had 9.7 million elderly people, an increase of 500,000 per year. of these, 95% or 9.2 million were ill. Most had hypertension, 41% (Thai Health Promotion Foundation, 2014). According to the mortality statistics of Thailand in 2014, the cause of death from hypertension and stroke was the second leading cause of death from cancer. And the rate of patients with hypertension is increasing every year (Bureau of Policy and Strategy, 2014). From statistics of hypertension in Surin Province, the lowest blood pressure control was found in Srinarong district. There were 2,208 patients with hypertension, strong, controlled blood pressure 568 people, 25.77%, and unable controlled blood pressure 1,644 people, 74.23%. It can be seen that the number of patients who had unable controlled blood pressure was more than patients who had unable controlled blood pressure. This is a problem that must be managed continuously (Surin Provincial Health Office, 2016). Most hypertension patients do not show any symptoms. It was not treated, and blood pressure was not controlled. Hypertension is gradual. The blood vessels in the body gradually deteriorate is a stroke. The coronary arteries and blood vessels in these vital organs can cause death or paralyzed (Maharaj Nakorn Chiang Mai Hospital, 2012).

The literature review on the relationship between perceived risk factors, perception of warning symptoms and self-care behaviors to prevent stroke in the elderly found older men and women aged 60-79 years are at high risk for stroke. The elderly who are at high risk for stroke have 81.40 percent of those with hypertension. The highest rate was 57.60%. Therefore, it had hypertensive elderly who unable controlled blood pressure. Knowing stroke is important. This leads to increased self-assessment of stroke symptoms (Kumpangkaew, K, Somboontanont, W, and Leelahakul, V, 2015).

As mentioned above, it is clear that hypertension, if not appropriately treated and continuously it can cause complications or may cause more severe disease. The difficulties can be fatal. Therefore, the study focused on the elderly who did not control blood pressure. Researchers are interested in studying the perception of stroke symptoms and self-management behaviors in elderly hypertensive patients who admitted to Srinarong Hospital, Srinarong District, Surin Province.

Objectives

1. To study perceived warning signs of cerebrovascular disease among older adults with uncontrolled hypertension disease in Srinarong Hospital, Srinarong District, Surin Province.

2. To study self-management behaviors among older adults with uncontrolled hypertension disease in Srinarong Hospital, Srinarong District, Surin Province.

Methods

Population

The study population was 391 people who are 60 years old with uncontrolled hypertension in Srinarong Hospital, Srinarong District, Surin Province.
Sample

This study was conducted in older adults with uncontrolled hypertension disease. The sample is calculated from the Thorndike formula (Cite Srisatidnarukul, B, 2010). It was calculated to 70 people and increased to 20 people for error, totaling 90 people and selected by simple random sampling.

Instruments

Part 1: Personal Information Interview, Part 2: Mini-Mental State Examination: MMSE - Thai version (MMSE-Thai 2002), Part 3: Perceived warning signs of cerebrovascular disease questionnaire was adapted from questionnaire of Kumpangkaew, K, Somboontanont, W, and Leelahakul, V. (2015) and the literature review, Part 4: Self-management behaviors of older adults with uncontrolled hypertension disease questionnaire was adapted from the Self-Management Behavior Questionnaire for the older adults with hypertension of Thatsaeng, B, Lasuka, D, and Khampolsiri, T. (2012) and from the literature review and tested for reliability using Cronbach’s alpha coefficient was 0.81 and 0.80 respectively.

Ethical Issues

Researchers have proposed a research framework to the Research Ethics Committee in Boromarajonani College of Nursing Surin. When it was approved, the researcher then collected the data. Each selected subject was explained the procedure and objectives of the study and written informed consent.

Statistical Analysis

Using computer program. The data analysis process is as follows.

1. Analyze personal data used the descriptive statistics including frequency, percentage, mean and standard deviation.

2. Analyze the perceived warning signs of cerebrovascular disease and self-management behaviors of older adults with uncontrolled hypertension disease used means and standard deviation.

Results

The samples consisted of 90 older adult with uncontrolled hypertension disease, mostly female, 57.78% and male 42.22%, the average age was 70.38 years, 95.56% of farmers were employed, followed by commercial trades (3.33%). Most of them graduated 66.67% of grade 4-6, followed by lower grade 4. Median family income was 2,350.00 baht per month. Most of them lived in self-sufficiency 83.33%, had self-consumption 80%. 85.56% had the disease divided to 14.44% had diabetes, 46.15% had heart disease, 15.38% had gout disease, 15.38% had anemia, 15.38% kidney disease 7.70%. The average duration of hypertension was 10.96 years. Most of the subjects had no family history of stroke at 97.78%. There were 2.22% of patients with stroke.

Most of the samples had perceived warning signs of cerebrovascular disease at the high level (M = 1.57, SD = 0.68). Considering that the majority of the samples had an average score of perceived warning signs of cerebrovascular disease at high level first 3 sequences including a
headache severely immediately and don't know causation be the warning signs of cerebrovascular disease (M = 1.88, SD = 0.45), confuse or giddy sided immediately be the warning signs of cerebrovascular disease (M = 1.81, SD = 0.52), and dysphonia or confused to speaking be the warning signs of cerebrovascular disease (M = 1.69, SD = 0.63) respectively, as shown in Table 1.

Most of the samples had high self-management behaviors (M = 3.56, SD = 0.59). Considering each side, it was found that the samples had high self-management behaviors 3 domains including 1) Medical management (M = 3.47, SD = 0.65) 2) Role management (M = 3.73, SD = 0.57) and 3) Emotional management (M = 3.47, SD = 0.55) respectively, as shown in Table 2.

**Table 1** Percentage, mean, standard deviation and the level of perceived warning signs, classified by perceived warning signs of cerebrovascular disease each item. (n=90)

<table>
<thead>
<tr>
<th>Perceived warning signs</th>
<th>Number of people (Percentage)</th>
<th>M</th>
<th>SD</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The weakness of face muscle, an arm/leg one-sided immediately is the warning signs of cerebrovascular disease.</td>
<td>61 (67.80) 17 (18.90) 12 (13.30)</td>
<td>1.54</td>
<td>0.72</td>
<td>High</td>
</tr>
<tr>
<td>2. Walking staggers or lose the ability in the Stabilize act be the warning signs of cerebrovascular disease.</td>
<td>67 (74.40) 13 (14.40) 10 (11.10)</td>
<td>1.63</td>
<td>0.68</td>
<td>High</td>
</tr>
<tr>
<td>3. Dysphonia or confused to speak be the warning signs of cerebrovascular disease.</td>
<td>70 (77.80) 12 (13.30) 8 (8.90)</td>
<td>1.69</td>
<td>0.73</td>
<td>High</td>
</tr>
<tr>
<td>4. Feeling numb of face muscle, an arm/leg one-sided immediately be the warning signs of cerebrovascular disease.</td>
<td>59 (65.60) 19 (21.10) 12 (13.30)</td>
<td>1.52</td>
<td>0.72</td>
<td>High</td>
</tr>
<tr>
<td>5. Unable or difficult to gulp down one's saliva be the warning signs of cerebrovascular disease.</td>
<td>38 (42.20) 24 (26.70) 28 (31.10)</td>
<td>1.11</td>
<td>0.85</td>
<td>Moderate</td>
</tr>
<tr>
<td>6. Confuse or giddy sided immediately be the warning signs of cerebrovascular disease.</td>
<td>78 (86.70) 7 (7.80) 5 (5.60)</td>
<td>1.81</td>
<td>0.52</td>
<td>High</td>
</tr>
<tr>
<td>7. A headache severely immediately and don't know causation be the warning signs of cerebrovascular disease.</td>
<td>83 (92.20) 3 (3.30) 4 (4.40)</td>
<td>1.88</td>
<td>0.45</td>
<td>High</td>
</tr>
<tr>
<td>8. One-sided or both eyes have blurred or unable to see immediately be the warning signs of cerebrovascular disease.</td>
<td>69 (76.70) 11 (12.20) 10 (11.10)</td>
<td>1.66</td>
<td>0.67</td>
<td>High</td>
</tr>
<tr>
<td>9. Urinary incontinence (urine flows unconsciously) be the warning signs of cerebrovascular disease.</td>
<td>44 (48.90) 25 (27.80) 21 (23.30)</td>
<td>1.26</td>
<td>0.82</td>
<td>Moderate</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1.57</td>
<td>0.68</td>
<td>High</td>
</tr>
</tbody>
</table>
Table 2 Mean, standard deviation and the level of self-management behaviors, classified by self-management behaviors each item. (n=90)

<table>
<thead>
<tr>
<th>Self management behaviors</th>
<th>M</th>
<th>SD</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Medical management</td>
<td>3.47</td>
<td>0.65</td>
<td>High</td>
</tr>
<tr>
<td>2. Role management</td>
<td>3.73</td>
<td>0.57</td>
<td>High</td>
</tr>
<tr>
<td>3. Emotional management</td>
<td>3.47</td>
<td>0.55</td>
<td>High</td>
</tr>
<tr>
<td>Totally</td>
<td>3.56</td>
<td>0.59</td>
<td>High</td>
</tr>
</tbody>
</table>

Discussion
The results showed that the mean score of perceived warning signs of cerebrovascular disease was high (M = 1.57, SD = 0.68) because most of the samples were closely supervised by the caregivers, with excellent health support. And from the initial brain condition assessment (MMSE), all the samples did not have dementia. Thus, when doctors and nurses give advice, they can recognize and understand the symptoms of stroke.

The results showed that the mean scores of self-management behaviors were high (M = 3.56, SD = 0.59). It can be explained that everybody who visited the doctor every time, talk to the health team and get advice on self-management such as taking medication and appointments, eating the right foods, exercise and avoid the use of extreme force that can result in and cause more severe disease. They also shared their experiences with patients with the same disease. Some elderly people live with their families and get family support by caregivers who handle medication and eating, make sure they see their doctor and access to self-management information of the disease through advertising on television, radio, and internet. Some older adults do not have caregivers, but they take care of themselves. They said “they try to take care of themselves about the disease which made their health better because doctors provide information about the effects that may occur if blood pressure is not controlled. Thus, the awareness of self-management is very crucial. Based on the above data, the samples had high self-management behaviors.

Suggestions
1. Suggestions to use the research results.
   1.1 We should followed up to older adults with hypertension disease who had perceived warning signs of cerebrovascular disease who was at the moderate level because they were a group of high risk to cerebrovascular disease.
   1.2 Health care provider should set up the activities to exchange the experience and learning together between the patients who had moderate and high level of self-management behaviors.
   1.3 Proactive services should be provided for the development of health promoting behaviors, nutritional activity, and compliance with the characteristics of older adults and appropriate with patients to achieve proper health behavior.
   1.4 Having activity for educate caregivers who take care of a group of high risk to cerebrovascular disease.

2. Suggestions to the next research.
2.1 Have to study and evaluate periodically about counseling patients especially knowledge and treatment to proper health behaviors to reduce complication.

2.2 Have to study for developing guideline for reinforce self-management behaviors of older adults with uncontrolled hypertension disease.

2.3 Have to study qualitative research about self-care culture of older adults with uncontrolled hypertension disease in Kuy, Laos, and Cambodia.

2.4 Have to prepare self-management behaviors of older adults with uncontrolled hypertension disease between men and women.

Reference


