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EFFECT OF SPIRITUAL NURSING CARE ON THE LEVEL OF ANXIETY IN PATIENTS WITH STROKE

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Abstract
Background: Anxiety in stroke patients occurs as a normal reaction to stress with life changes; however, when it becomes excessive, it will be disorder. Effort to deal with anxiety is needed and spiritual approach nursing care is considered useful in caring patients with stroke.
Objective: To examine the effect of spiritual nursing care on anxiety in stroke patients in the inpatient ward.
Methods: This study used a quasi-experimental design with pretest-posttest control group. Thirty respondents were selected using consecutive sampling, which 15 respondents assigned in the experiment and control group. The Hamilton Anxiety Rating Scale was used to measure anxiety. Data were analyzed using paired t-test and independent t-test.
Results: The results showed that the mean level of anxiety in the experiment group before intervention was 29.33 and decreased to 9 after intervention, while in the control group the mean level of anxiety before intervention was 29.47 and decreased to 17.73 after intervention. Paired t-test obtained p-value 0.000 (<0.05), which indicated that there was a significant effect of spiritual nursing care on anxiety levels in patients with stroke.
Conclusion: Spiritual nursing care could reduce anxiety in patients with stroke.

Keywords: stroke; caring; spiritual; anxiety; patient

INTRODUCTION

Stroke is a state of a sudden neurological deficit due to partial or total obstruction because of thrombus or embolus in the cerebrovascular or ruptured blood vessel wall (Patricia, Dorrie, & Barbara, 2012; Smeltzer et al., 2008). Stroke is the second leading cause of death in the world (WHO, 2017). In 2030 the mortality rate is projected at 7.8 million caused by stroke (Grotta & Lo, 2015). In Indonesia, the prevalence of stroke is 12.1 per 1000 population (MOH, 2013).

Clinical manifestations of stroke depend on the area of the lesion and the amount of collateral circulation. Clinical manifestations vary, associated with psychological form of emotional disturbance such as anxiety (Sami, Shirley, & Nadina, 2015; Zulkifly et al., 2016). Anxiety exists because of disability, and sudden life changes due to stroke (Zulkifly et al., 2016). Anxiety rates range from 22-28%, whereas anxiety levels vary from mild, moderate, and severe. Anxiety levels with moderate category is the greatest number reaching 71.8% (Kneebone & Lincoln, 2012; Kustiawan, 2015; Norrving, 2014). Anxiety can affect the quality of life of the patient, interfere with emotional function,

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cognitive and adaptation to disease, disrupt the recovery process, decrease patient independence in activity daily living, disturb social interaction and isolation (Ferro, 2013; Mead & Van Wijk, 2012; Tanner, 2008), and even lead to a spiritual crisis (Sammarco, 2016).

Non-pharmacological approaches to overcome anxiety can be given a holistic care, including spiritual nursing care (Dossey, Certificate, Keegan, & Co-Director International Nurse Coach, 2012). This is in line with Swanson's view indicated that human is viewed as a spiritual being in caring theory (Alligood, 2014). Spirituality plays a major role in supporting individuals to achieve the balance between body, mind and spirit needed to maintain health and wellbeing, and in adapting to ill conditions (Patricia et al., 2012). Koenig's opinion in the stroke patient recovery process, indicated that spiritual factors have a major role in maintaining motivation and hope (Koenig & Saris, 2002). This study aimed to examine the effect of spiritual nursing care in reducing anxiety in stroke patients in the inpatient ward.

METHODS

Study design and setting

This study employed a quasi-experimental design with pretest-posttest control group. This study was conducted in the general hospital of dr. H. Moch. Ansari Saleh Banjarmasin from 3 March to 28 April 2017.

Sample

The target population in this study was all non-hemorrhagic stroke patients in the general hospital of dr. H. Moch. Ansari Saleh Banjarmasin in 2017. Of 30 samples selected using consecutive sampling, which divided into experiment group (15 respondents) and control group (15 respondents). The inclusion criteria of patients were: composmentis, non-hemorrhagic stroke, experienced anxiety and willing to participate in the research by filling informed consent.

Intervention

Spiritual nursing care intervention is developed based on caring theory (knowing, being with, doing for, enabling, and maintaining belief) of Swanson and caring dimensions of O'Brien about the practice of spiritual care (being with, listening, touching). The spiritual nursing care was given in three days with the following steps: (i) preparing and managing room with adequate ventilation and lighting, and keeping the patient's privacy, (ii) greeting with eye contact and smiling, introducing and sitting beside the patients, listening to the patient's experience (the nurse's eyes focused on the patients, not seeing elsewhere while the patient was talking, avoiding interrupting, denouncing or interrupting), focusing on verbal and nonverbal expression of patient feelings, answering their questions as necessary, staying with patients in silence while not talking because patients feel pain and sensitive, (iii) responding to the most basic needs of patients such as eating, drinking, personal hygiene, dressing, decorating, eliminating, facilitating the need for prayer, or refer to religious leaders when necessary, and (iv) informing families to engage in care, and motivating patients with reinforcing words, and re-clarifying the things needed before leaving the patient room.

Instrument

Hamilton Anxiety Rating Scale developed by Max Hamilton in 1959 was used to measure anxiety, which has been translated to Indonesian language (Wati, Mardiyono, & Warijan, 2017).

Ethical consideration

This study has been approved by the Research Ethic Commission of Poltekkes Kemenkes Semarang. The researchers confirmed that each respondent has signed an appropriate informed consent.

Data analysis

Data were analyzed using paired t-test and independent t-test. Using Shapiro-Wilk, data in the experiment group (p=.13) and control group (p=.88) were normally distributed.

RESULTS

Table 1 Characteristics of respondents based on gender

Group	Gender			
	Female		Male	
	n	%	n	%
Experiment	8	53.3	7	46.7
Control	8	53.3	7	46.7

Table 1 shows that the number of respondents based on gender in the experiment and control group was equal, which consisted of 8 females (53.3%) and 7 males (46.7%). Based on table 2 it can be concluded that the most respondents in the experiment group were in the age group of 60-69 years as many as 9 respondents (60%), while in the control group, age of respondents at most in the range of 50-59 years as many as 6 respondents (40%)

Table 2 Characteristics of respondents based on age

Age	Experiment		Control	
	f	%	f	%
30-39	0	0	1	6.67
40-49	5	33.33	3	20
50-59	1	6.67	6	40
60-69	9	60	1	6.67
70-79	0	0	3	20
80-89	0	0	1	6.67

Table 3 Frequency distribution of anxiety before and after given intervention in the experiment and control group

Anxiety level	Experiment group				Control group			
	Pretest		Posttest		Pretest		Posttest	
	n	%	n	%	n	%	n	%
Severe	4	26.67	0	0	12	80	0	0
Moderate	11	73.33	0	0	3	20	0	0
Mild	0	0	14	93.33	0	0	15	100
No anxiety	0	0	1	6.7	0	0	0	0

Table 3 shows that the level of anxiety of patients in the experiment group before intervention was in the severe category (26.67%) and moderate category (73.33%), but after intervention the level of anxiety became mild category (93.33 %) and no anxiety (6.7%). While in the control group the level of anxiety of patients before intervention was in severe category (80%) and moderate category (20%), and after intervention all respondents were in moderate category (100%).

Table 4 Anxiety level of the experiment and control group

Group	Anxiety level Mean ± SD
Experiment group	
Pretest	29.33±6.11
Posttest	9.00±3.00
Control group	
Pretest	29.47±2.00
Posttest	17.73±2.63

Table 4 shows that the mean level of anxiety in the experiment group before intervention was 29.33 and decreased to 9 after intervention, while in the control group the mean level of anxiety before intervention was 29.47 and decreased to 17.73 after intervention.

Table 5 shows that paired t-test obtained p-value 0.000 (<0.05), which indicated that there was a significant effect of spiritual nursing care on anxiety levels in the experiment group. Similar with the control group, there was a significant effect of intervention on anxiety levels.

Independent t-test in the table 6 shows that there was a significant difference of the mean level of anxiety between the experiment and control group (p=0.000), which indicated that there was a higher decrease of anxiety level in the experiment group compared with the control group.

Table 5 Differences of anxiety levels before and after intervention between experiment and control group using Paired t-test (n=30)

Group	Mean ± SD	t	p-value
Experiment	20.33± 4.73	16.65	0.000
Control	11.73± 2.31	19.64	0.000

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Table 6 Mean difference of anxiety level before and after intervention between experiment and control group using Independent t-test (n=30)

Group	Mean ± SD	t	p-value
Experiment	20.33±4.73	6.33	0.000
Control	11.73±2.31	6.33	0.000

DISCUSSION

The results showed that there was a decrease of anxiety levels in both groups with the mean difference value in the experiment group was 20.33 and control group was 11.73. There was a statistically significant difference in anxiety level between the experiment and control group after given intervention. It proves that spiritual nursing care could decrease the level of anxiety in patients with stroke.

Spiritual nursing care done by nurses in this study reflects attitudes, actions or behaviors in caring activities such as assisting, listening, communicating, giving a verbal and nonverbal touch, being empathy, conscience, commitment, confidence and competence with the aim that patients will not feel alone, but feel welcome, understood, and be open to express feelings and make them have hope. This is also in line with caring's theory of Swanson which considers human as spiritual

beings (Alligood, 2014), and also caring dimension (Branch, 1999).

Spiritual nursing care refers to supporting the fulfillment of spiritual needs, so that the patient has the energy and has a better coping mechanism. The spiritual connection of the post-stroke patient can affect his ability to adapt to stroke, increase motivation, hope and self-confidence (Sammarco, 2016). Spirituality is the energy that can produce balance in the body, mind and spirit (Doreen, 2016), so that the energy can be focused inside to protect and strengthen positive thinking, and can be used creatively to achieve balance and move or improve adaptation mechanisms so as to facilitate wellbeing and healing from within or inner healing (Doreen, 2016).

Spirituality ultimately results in a relaxed response, which is a resting state from physiological and psychological functions. This condition is indicated by a decrease in central nervous system activity that affects the decreasing heart rate, respiratory rate, blood pressure, muscle tension, brain activity, and increased skin temperature (Lewis et al., 2016).

The results of this study was in line with previous study revealed that spiritual care can reduce anxiety in pre-operative patients (Wulandari, 2013). Another study said that spiritual program can promote spiritual welfare (Moeini, Ghasemi, Yousefi, & Abedi, 2012). In addition, spiritual care could affect anxiety in patients with cancer (Torabi, Sajjadi, Nourian, Borumandnia, & Farahani, 2017).

This study provides the insight of knowledge about spiritual nursing care activities, which is expected to support spiritual fulfillment in stroke patients using nursing theory but can be universally administered by nurses regardless of religion, but when it comes to meeting the needs of religion the nurse also can still facilitate it, such as closing the equipment necessary for the needs of prayer / worship, reminding the time of prayer or referring to religious leaders when necessary. So, the spiritual support that nurses can independently have can be aimed at stimulating the patient to find or re-enforce his or her relation to awaken and reconnect either with oneself, others or with a higher power or God (Brunner, 2010), as well as to find the meaning or purpose in life and be able to adapt to chronic illness and improve quality of life (Perry & Potter, 2005).

CONCLUSION

Based on the result of this study, it can be concluded that there was a significant effect of spiritual nursing care on anxiety levels in patients with stroke. This intervention should be recommended for nurses to apply spiritual approach in their nursing care.

Declaration of Conflicting Interest
None declared.

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Author Contribution
All authors contributed equally in this study.

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