
The Effect Of Cognitive Therapy On The Anxiety Level Of Client With Chronic Renal Failure Undergoing Hemodialysis Therapy in dr. Doris Sylvanus Hospital

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ABSTRACT

Psychological problems that often found in patients with chronic renal failure undergoing hemodialysis is anxiety. When experiencing anxiety patients use coping to try to overcome them. Coping strategies used by each patient are not always the same, can be either adaptive or maladaptive, so it takes appropriate nursing interventions to help clients overcome psychological problems, one of them through cognitive therapy. The design used in this study research design: "ONE GROUP-PRE-TEST POST-TEST-DESIGN". In this study population was patients with chronic renal failure undergoing hemodialysis therapy in BLUD dr. Doris Sylvanus Palangkaraya hospital. Sampling by using total sampling, ie all patients with chronic renal failure undergoing hemodialysis therapy in the hospital dr. Doris Sylvanus Palangkaraya as many as 35 people and met the inclusion criteria. Results of statistical test by using test dependent sample t-test (Paired t-test) showed that the level of anxiety after the respondent is given cognitive therapy significantly decreased by 4.08 with a p-value = 0.000 (α 0.05). Based on the results of the statistical tests, it can be concluded that the α 5% there is no significant change in the average level of anxiety before and after the intervention is given in the form of cognitive therapy (p-value 0,000 $<$ α 0.005). This research is expected to contribute positively to the management of cases in patients with chronic renal failure who experience anxiety in order to assist patients in overcoming psychological problems due to illness.

Keywords: cognitive therapy, chronic renal failure, hemodialysis

INTRODUCTION

Replacement therapy like hemodialysis and renal transplantation often followed by psychological problems that can affect the disease (Margono, 2001). Psychological disorders found in patients with chronic renal failure (CRF) who undergo hemodialysis therapy include depression, sexual problems, and disobedience in diet and drugs. Another common psychological problem in patients undergoing hemodialysis is anxiety.

Anxiety is confusion, fear of something that will happen with an unclear cause associated with feelings that are uncertain and powerless. Anxiety is an emotional response with non-specific objects that are subjectively subjected to and combined interpersonally (Stuart, 2009). Anxiety conditions in clients with chronic renal failure who undergo hemodialysis therapy require good and appropriate nursing interventions where one of them is through cognitive therapy.

Cognitive therapy is a form of psychotherapy that can train the patient to

change the way of interpreting and looking at things in times of disappointment, so he feels better and can act more productively. A client with CRF undergoing hemodialysis therapy is at risk for anxiety, depression and low self-esteem that is chronic which can make their physical condition worse. With cognitive therapy, the patient is expected to be able to overcome the negative thoughts that arise in his mind.

From several studies explored, researchers have not found a study of the effect of cognitive therapy on anxiety levels of patients with CRF undergoing hemodialysis therapy. Though this therapy can also be given to patients who need cognitive reconstruction due to anxiety experienced.

Based on the presentation, researchers are interested in knowing more about the effect of cognitive therapy on anxiety level of CRF patients undergoing hemodialysis therapy in dr. Doris Sylvanus Palangka Raya.

RESEARCH METHODS

The design used in this study using research design: "ONE GROUP-PRE-TEST-POST-TEST DESIGN" that defined by Prasetyo & Jannah (2005) is: An experimental group measured its dependent variable (pre-test), then given a stimulus, and measured again its dependent variable, without a comparison group. Therefore, in this study, samples that have met the inclusion criteria are first measured against the anxiety level as the first stage observation (pre-test). Anxiety questionnaire using the State-Trait Anxiety Inventory (STAI) created by Spielberger in 1983. STAI is designed to measure A-State and A Trait. The State scale consists of 20 items designed to measure how subjects feel about certain events. The scores obtained indicate the degree of temporary anxiety characterized by the onset of fear, tension, and symptoms induced by the central nervous system: anxiety, worry, and fear. While the Trait shape scale consists of 20 items designed to measure anxiety as a characteristic of a stable personal or

stable character or to assess the predisposition of an individual to assess the situation as a danger or threatening circumstance.

In scoring the STAI, each item is scored or a score of 1 to 4. The patient provides self-assessment of each statement using the Likert scale. For A-State with a score of 1 = not at all, 2 = rather, 3 = medium, 4 = very. As for A-Trait with score 1 = almost never, 2 = sometimes, 3 = often, 4 = almost always. A score of 4 indicates high anxiety for 10 A-State items and 11 A-Trait items. A high score indicates no anxiety for the remaining 10 A-State items and 9 A-Trait items. An item about the absence of anxiety, the score is reversed in sequence, ie the value of 1, 2, 3, 4 diskor with 4, 3, 2, 1. Item about the absence of anxiety where the score is reversed on the A-State scale that is at number 1, 2, 5, 8, 10, 11, 15, 16, 19, 20, and on the A-Trait scale are at 21, 23, 26, 27, 30, 33, 34, 36, 39. Total scores on each instrument (SAI or TAI) is the sum of the overall response, with 20-39 = mild anxiety, 40-59 = medium anxiety, and 60-80 = severe anxiety. The measurement

results are poured into the data collection sheets that are already available. Subsequently, respondents were given intervention in the form of mental nursing therapy: cognitive therapy, then observed the change of anxiety level as the second stage of observation (post-test). The results of the observations are set forth in the data collection sheets as done in the first stage.

The content validity of the anxiety questionnaire was tested by Dwiningsih in 2004 with the research site in Semarang, which had previously been evaluated by three experts, an anesthesiologist, a psychiatrist from Dr. Kariadi Semarang, and an expert from Poltekes Semarang. The reliability test of the anxiety instrument was performed by Dwiningsih in 2004 with the reliability coefficient of 0.94 for A-State, and 0.89 for A-Trait.

RESEARCH RESULT AND DISCUSSION

The research was conducted after obtaining Research Permit from Bappeda Kota Palangka Raya through letter No. 2809 / I-C-4 / Bapp dated September 11, 2014, regarding Research Permit. Based on the Bappeda permit, the

researcher went on to make a Letter of Permission for Taking Research Data to the Director of BLUD RSUD dr. Doris Sylvanus Palangka Raya through the letter of Director of Poltekkes Kemenkes Palangka Raya Number LB.02.01 / I / 1854 dated 26 September 2014 regarding Application for Permission Data Collection.

Research result

1. Distribution of Respondents by Age Group

Age Groups	Frequency	Percentage
1. 26-35 years	7	20,0
2. 36-45 years	11	31,4
3. 46-60 years	17	48,6
Total	35	100,0

2. Distribution of Respondents by Level of Education

Level Of Education	Frequency	Percentage
1. SD	5	14,3
2. SMP	3	8,6
3. SMA	16	45,7
4. PT	11	31,4
Total	35	100,0

3. Distribution of Respondents by Occupation

Occupation	Frequency	Percentage
1. PNS	8	22,9
2. TNI/POLRI	1	2,9
3. entrepreneur	18	51,4
4. others	8	22,9
Total	35	100,0

4. Distribution of Respondents by Length of Hemodialysis therapy

Length of Hemodialysis	Frequency	Percentage
1. 0-5 years	33	94,3
2. 6-10 years	2	5,7
Total	35	100,0

5. Anxiety Level of Respondents Before Intervention

Characteristics	N	Minimum	Maximum	Mean
Anxiety Level Before Intervention	35	28	55	41.94

6. Anxiety Level of Respondents After Intervention

Characteristics	N	Minimum	Maximum	Mean
Anxiety Level After Intervention	35	25	51	37.86

7. Difference of Anxiety Level of Respondents

Before and After Intervention Conducted

Variable	n	Mean	SD	SE	t	p value
Anxiety level						
a. Before	35	41,94	8,292	1,402	8,238	0,000
b. After	35	37,86	7,397	1,250		
Difference		4,08	0,895			

Discussions

Anxiety is an emotional experience and a response that occurs when a person faces pressure or events that threaten his life (Slamet, 2001). In this study found that patients undergoing hemodialysis experience anxiety ranging from mild to moderate. The existence of anxiety in patients in this study supported qualitative research conducted by Nugroho in 2004 at Telogorejo Hospital Semarang, who reported that all patients undergoing hemodialysis experienced anxiety. This situation is in accordance with the literature that anxiety generally occurs in patients with chronic renal failure because the disease is perceived as a threat. Patients undergoing hemodialysis highly expect life from a hemodialysis machine

and must adapt to restrictions, learn from living with chronic illness and the possibility of death threats (Siregar, 2002).

In addition, chronic renal failure results in many changes in the body's system, and this causes psychological problems, especially to the extent that the healing efforts have not satisfied many people, although various ways have been done (Suwandi, 2002). This situation is supported by the literature that anxiety can be caused by threats to one's integrity, including impending physiological inability, or decreased capacity to engage in daily life activities, and threats to one's self-system that can harm identity, self-esteem and social function which is integrated in a person (Stuart, 2009).

In this study obtained the level of education majority respondents are high school (45.7%). This condition may be a contributing factor in the onset of anxiety in patients undergoing hemodialysis. This is supported by a previous study by Junait (2003) who found an association between education and socioeconomic anxiety in patients with terminal

renal failure who underwent hemodialysis. According to the literature, the level of education and low economic status will make the person susceptible to anxiety. The level of education a person or individual will affect the ability to think, the higher the level of education will be easier to think rationally and capture new information including in outlining new problems (Stuart, 2009).

The results of this study indicate that prior to the intervention, the majority of patients experienced moderate anxiety with an average score of anxiety score of 41.94. These results are similar to previous results of a Junait study in 2003, which reported that most patients undergoing hemodialysis had moderate anxiety (50%), then severe anxiety (20%), and mild anxiety (13%). According to Margono (2001), in patients with chronic renal failure who underwent hemodialysis, anxiety was also influenced by duration of hemodialysis. Almost all patients in this study are still undergoing hemodialysis within the range of 0-5 years, which allows patients to adapt. According to the

literature, chronic renal failure patients end-stage undergoing hemodialysis undergo several stages of adaptation, including the period of the honeymoon. This period begins the first week of hemodialysis for up to six months, where patients still receive dependence on hemodialysis machines and still have self-esteem and respect (Margono, 2001).

Besides that, in this study, the majority of patients (48.6%) who underwent hemodialysis over the age of 45 years, which allows patients are more mature, accustomed and experienced in responding to anxiety that arises. This is supported by the expert opinion that told someone who has a younger age was more susceptible to interference from anxiety than an older person (Varcarolis, 2000). In addition, mature individuals, individuals who have a personality maturity will be more resistant to experience disruption due to stressors.

So that, anxiety is a common psychological problem experienced by patients with chronic renal failure (CRF) undergoing

hemodialysis. Levels of anxiety in patients who undergoing hemodialysis may vary. This level of anxiety can be affected by several factors, including age, education, and length of hemodialysis.

Chronic renal failure (CRF) is a chronic disease, as it is a permanent disorder of renal function, it can also cause disruption to neurological, endocrine, metabolic and another organ failure. People who suffer from CRF will feel worried, feel helpless, tense, confused, feel uncertain (Dwiawan, 2008). That which, if not handled properly, can lead to more severe psychological problems. In addition, the late-stage of CRF patient's attachment to the hemodialysis machine for its survival will result in a psychological impact persisting. Psychological reactions are closely related to hemodialysis therapy is the response of fear and anxiety, depression, suicidal tendencies, social dysfunction, and psychosexual problems (Suwandi, 2002). Therefore, the psychological condition of anxiety experienced by CRF patients undergoing hemodialysis is necessary

to obtain management of mental nursing care, one of which may be administered through cognitive therapy.

Cognitive therapy is one form of appropriate psychotherapy given to patients with CRF. This is because cognitive therapy is a structured form of psychotherapy that aims to relieve symptoms of the disease and helps patients learn more effective ways of overcoming the difficulties that cause their suffering. A therapeutically important part of problem-oriented cognitive therapy and directed to correct psychological problems that can add to the suffering of the patient. This is similar to that proposed by Burn (1980) that cognitive therapy aims to turn negative thoughts into positive, to know the cause of perceived negative feelings, to help self-control and prevention and personal growth.

The results of this study showed that after intervention in the form of cognitive therapy, there was a decrease in anxiety level from moderate level to mild anxiety level with an average score of 37.86 anxiety level. This is

consistent with Beck et al (1979) in Varcariolis (2006) that cognitive therapy can be applied to depression and other psychiatric problems, such as panic, problems for anger control and drug users. CRF patients undergoing hemodialysis therapy have feelings of the shame, insecurity, and helplessness due to the physical weakness that makes them dependent on dialysis therapy. The more complex problems arise because of poor financial and prognostic problems about CRF disease that can lead to death makes an anxiety of patients with CRF will become worse and prolonged (chronic). This is why the CRF patient always has negative thoughts about himself, his ability and his future. By giving cognitive therapy expected negative thoughts of CRF patients can be a more positive thinking about him now and the ability that is still owned so that CRF patients can live the rest of his life with more productive and quality.

The result of the statistical test by using t-test dependent test (Paired t-Test) showed that the anxiety level of respondents after giving cognitive therapy decreased significantly by

4.08 with $p\text{-value} = 0,000$ ($\alpha 0,05$). Based on the result of the statistical test, it can be concluded that at $\alpha 5\%$ there is a significant change mean anxiety level of the respondent before and after given intervention in the form of cognitive therapy ($p\text{-value} 0,000 < \alpha 0,005$). The results of this statistical analysis reinforce the results of research conducted Rush AJ, Beck, AT, Kovacs, M, and Hollon, S (1977, in Burns, 1988) who conducted a study of 44 patients who suffered severe depression which after 12 weeks of research, of the 19 people who received cognitive therapy showed full recovery and 5 of the 25 people who received antidepressant therapy showed the condition was cured. This suggests that cognitive therapy is an appropriate therapy for the psychological problems of an anxiety-experienced CRF patient.

Based on the result of the statistical test in this research, it can be concluded that at $\alpha 5\%$ there is a significant change anxiety level of the respondent before and after given intervention in the form of cognitive therapy ($p\text{-value} 0,000 < \alpha 0,005$). Despite the final condition of

the respondents after cognitive therapy intervention, there were still 8 patients at moderate anxiety levels, but this intervention proved to be a significant outcome in reducing the anxiety levels of patients with CRF undergoing hemodialysis when compared with prior cognitive therapy interventions.

CONCLUSIONS AND RECOMMENDATIONS

The result of the statistical test by using t-test dependent test (Paired t-Test) showed that the anxiety level of respondents after giving cognitive therapy decreased significantly by 4.08 with $p\text{-value} = 0,000$ ($\alpha 0,05$). Based on the result of the statistical test, it can be concluded that at $\alpha 5\%$ there is a significant change mean anxiety level of the respondent before and after given cognitive therapy intervention ($p\text{-value} 0,000 < \alpha 0,005$).

Referring to the results of this study, it can be suggested to the institution dr. Doris Sylvanus Hospital of Palangka Raya to be able to collaborate on medical management of CRF

patients undergoing hemodialysis therapy with nursing care interventions to help patients overcome the psychological impact of their illness, one of them through cognitive therapy. This can also be achieved through the improvement of the nurse's ability of hemodialysis chamber in performing psychological nursing interventions.

REFERENCES :

- Burns, D.D. 1988. *Terapi Kognitif : pendekatan baru bagi penanganan depresi*. Jakarta : Erlangga.
- Dwiningsih SU. 2004. *Pain, Anxiety, and Coping with Cancer Patient in Semarang*. Tesis. Songkla. Thailand.
- Dwiawan, D. 2008. *Dampak Dukungan Sosial Dalam Mengurangi Kecemasan Pada Pasien Wanita Penderita Gagal Ginjal Kronis Di Rumah Sakit Khusus Ginjal Ra.Habibie Bandung*.
<http://library.gunadarma.ac.id/index.php?appid=penulisan&sub=detail&npm=10599048&jenis=s1fpsi> diperoleh tanggal 3 Nopember 2014.
- Hawari, D., 2008, *Manajemen Stres Cemas dan Depresi*, Jakarta : Balai Penerbit FKUI
- Hudak CM, Gallo BM. 1997. *Keperawatan Kritis*. Edisi IV. Alih Bahasa Allenidekania dkk. EGC. Jakarta.
- Ibrahim Kusman. 2004. *Correlation Between Coping and Quality of Life of Haemodialysis Patient and Their Spouses*. Tesis. Songkla. Thailand.
- Junait. 2003. *Faktor-faktor yang Berhubungan dengan Kecemasan pada Pasien Gagal Ginjal Terminal yang Sedang Menjalani Terapi Hemodialisis di RS Dr. Kariadi Semarang*. Tidak dipublikasikan
- Kozier Barbara. 2004. *Fundamentals of Nursing: Concepts, Process, and Practice*. 7th Edition. New Jersey.
- Lazarus RS, Folkman S. 1984. *Stress, Appraisal, and Coping*. Springer Publishing Company. New York.
- Lubis, A.J. 2006. *Dukungan Sosial Pada Pasien Gagal Ginjal Terminal yang Melakukan Terapi Hemodialisa*,
<http://library.usu.ac.id/> diperoleh tanggal 3 Nopember 2014.

- Margono H, Sulistyarini T. 2001. Kecemasan pada Pasien GGT yang Sedang Menjalani Terapi di RS Dr. Soetomo Surabaya. Dalam: Majalah Psikiatri Tahun XXXIV No 3. Yayasan Kesehatan Jiwa Dharma Wangsa. Jakarta.
- Nugroho Yasmini. 2004. Respon Cemas Pasien Gagal Ginjal Terminal yang Menjalani Terapi Hemodialisis di RS Telogorejo Semarang. Tidak dipublikasikan
- Nursalam. 2003. Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan: Pedoman Skripsi, Tesis dan Instrumen Penelitian Keperawatan. Jakarta : Salemba Medika.
- Siregar P. 2002. Komplikasi Intradialitik pada Hemodialisis. Dalam: Simposium Nasional Keperawatan Ginjal dan Hipertensi. Jakarta.
- Smeltzer SC, Bare BG. 2001. Buku Ajar Keperawatan Medikal Bedah Brunner & Suddart. Edisi 8. Alih Bahasa Agung Waluyo dkk. EGC. Jakarta.
- Spielberger CD. 1983. Manual for State Trait Anxiety: Self Evaluation Questionare. Palo Alto. Consulting Psychologist Press Inc.
- Stuart, G.W. 2009. Principles and Practice of Psychiatric Nursing. St. Louis: Mosby
- Suyono Slamet dkk. 2001. Buku Ajar Ilmu Penyakit Dalam. Edisi Ketiga. Balai Penerbit FKUI. Jakarta.
- Suwandi H. 2002. Gangguan Psikiatrik Penderita Gagal Ginjal. Bagian Ilmu Jiwa Fakultas Kedokteran UGM. Yogyakarta.
- Varcarolis, E.M. 2006. Psychiatric Nursing Clinical Guide: Assessment Tools & Diagnosis. Philadelphia: W.B. Saunders Company
- Yuwono A. 2000. Kualitas Hidup Penderita Gagal Ginjal Terminal yang Menjalani Hemodialisis Kronis dan Faktor-faktor yang Mempengaruhi di RSUP Dr. Kariadi Semarang. Tesis. Semarang.