

**COMPARISON SUPPORTIVE THERAPY AND AEROBIC GYMNASTICS
OF SCORES *AGGRESSION SELF-CONTROL* IN PATIENTS WITH RISK BEHAVIOUR OF
VIOLENCE IN THE INSTALLATION OF MENTAL HEALTH CARE
HOSPITAL OF BANYUMAS**

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ABSTRACT

Background: Violent behavior in patients with mental disorders sometimes showed the presence of aggression self-control is not good for patients. Interventions applied to patients with mental disorders who were treated with violent behavior can be a therapeutic exercise and activity therapy group. Objective: Objectives of study to compare the provision of supportive therapy and aerobic exercise therapy against aggression scores of self - control in patients with mental disorders with the risk of violent behavior in the service of Health Mental Installation Hospital of Banyumas. Method: Type of research is quasi experimental with two group pretest posttest design. The population of study were patients with mental disorders who were treated with violent behavior inpatient unit of Health Mental Installation Hospital of Banyumas in December 2014 as many as 118 patients and taken a sample of 30 people with purposive sampling technique. Data analyzed used paired t test. Result: The results were obtained scores of self - control aggression in patients at risk of violent behavior tends to decrease after supportive therapy. Aggression scores of self - control before therapy is 60.60 ± 3.20 and after therapy decreased to 48.20 ± 4.57 . Aggression scores of self - control in patients at risk of violent behavior tends to decrease after aerobic exercise therapy. Aggression scores of self - control before therapy is 61.00 ± 3.44 and after therapy decreased to 45.13 ± 3.58 . There are differences in aggression scores of self - control before and after supportive treatment ($p = 0.000$), as well as aerobic exercise therapy ($p = 0.000$). No differences in therapy and supportive therapy aerobics against aggression scores of self - control in patients at risk of violent behavior ($p = 0.05$). Conclusion: No differences in therapy and supportive therapy aerobics against aggression scores of self - control in patients at risk of violent behavior.

Key words : Aerobic Gymnastics Therapy, Supportive Therapy, Aggression Self - Control

INTRODUCTION

Mental healthy is everyone's dream, but this condition does not go on continuously. In life everyone will experience a variety of life stresses called stressors. This stressor will cause stress. Stress that is not handled properly then it will cause psychiatric problems, both psychosocial problems, as well as further problems of mental disorders.

World Health Organization (WHO), recorded until 2011 there are people with mental disorders of 542 million people or 8.1% of the total world population of about 6.7 billion people. About

10% of adults are currently mentally ill and 25% of the population is estimated to be mentally ill at any age during their lifetime. This age usually occurs in young adults between the ages of 18-21 years. According to the National Institute of Mental Health (NIMH) mental disorders account for 13% of the disease as a whole and are expected to grow to 25% by 2030 (WHO, 2012). Based on data from the Director General of Health Efforts Development of the Ministry of Health in 2011 recorded the total population of Indonesia amounted to 241 million people while about 17.4 million people (7.2%) have mental

disorders (MOHRI, 2011). Basic Health Research Results of the year (2013) showed that as much as 0.46% of the total population of Indonesia or about 1 million people suffered from psychotic disorders and 11.6% suffered emotional behavioral disorders towards respondents aged 15-64 years so that estimated mental disorders reached 19 Million people. The prevalence of severe national mental disorder is 1.7 per mile. This shows that in every 1000 people there are 4 to 5 people suffering from mental disorders. Severe major mental disorders in Yogyakarta, Aceh, South Sulawesi, Bali and Central Java (MOH, 2013).

Cases of mental health problems in Central Java continue to increase based on data from the Central Java Provincial Health Service (2009) stated that every 1000 Central Java residents there are 3 people with mental disorders. While 19 people every 1000 Central Java residents experience stress. Data from Central Java Provincial Health Office (2013) recorded 1,889 people with mental illness from the beginning of 2012 until July 2012. The data shows that the number of people with mental disorders per year in Indonesia, especially Central Java province is always increasing (Dinkes Jateng, 2013).

The results of a survey from the National Institute of Mental Nursing Health's Epidemiologic Catchment Area showed that 10,000 people who had committed violent behavior found 37.7% associated with substance abuse, 24.6% alcoholics, 12.7% schizophrenia, 11.7% Severe depression, 11% bipolar disorder and 2.1% uninterrupted (Kaplan & Saddock, 2010). The above data to identify violent behavior / aggression is one of the behavioral changes that are quite found in clients mental disorders.

Based on medical record data of RSUD Banyumas (2014) in 9 months from January to September 2014 it was found that the number of mental patients who had admitted to hospitalization were 1,484 patients and (60%)

with cases of violent behavior, (32%) cases of hallucinations, (4, 4%) cases of social isolation and (1.3%) due to miscellaneous cases. Details of patients admitted to hospitalization in January-March were 25 cases, April-June 28 cases, July-September 32 cases. The number is also accompanied by patients who have returned from January to September of 1,189 patients. From the description above data shows the prevalence of violent behavior cases in the inpatient rooms of Banyumas Integrated Mental Health Installation is quite high, and indicates the existence of poor self-control aggression in most patients, requiring serious handling of aggression self-control to reduce the incidence rate.

Violent behavior in psychiatric patients admitted to the Banyumas Integrated Mental Health Service Installation, indicates poor aggression of self-control in patients, leading to mental health providers providing interventions to improve the ability to control violent behavior in mentally-impaired patients. According Purba (2008), nursing interventions that can be done on violent behavior patients that include actions for patients and actions for the family. Interventions applied to psychiatric patients with violent behaviors treated can include exercise therapy and group activity therapy. Several studies of physical activity and exercise therapy on psychiatric disorders prove that physical activity can increase patient confidence in others (Campbell & Foxcroft, 2008).

Motion therapy is a physical activity therapy that can be done by exercising to train a person's body to be physically and spiritually healthy (Ariyadi, 2009). The type of motion therapy can be aerobic exercise that provides the benefits of reducing stress and controlling the emotions of people with mental disorders, increasing brain power, increasing feelings of happiness, and can fight aging. Landers (2009) states move the body for 10 minutes every day mental health will increase rapidly, other than that the power of thought will be more clear.

Other interventions that are used to overcome the problems of psychiatric patients are psychosocial therapy performed by reducing environmental stressors or enhance the ability of the sufferer to overcome them with social support. One model of psychosocial therapy that is often used in the community and hospital is the therapy group supportive activities because in the group interaction with each other and influence each other so that formed a social system that interact and become a place of clients practice new behaviors adaptive to improve Old maladaptive behavior (Christopher, 2011).

RESEARCH METHODOLOGY

The type of research used in this research is quasi experiment with two group pre test post test design is a quasi experimental research because the requirements as experimental research is not

RESEARCH RESULT

1. Respondent's characteristic

Patient demographic data with risk of violent behavior in Mental Health Service Installation of

sufficient enough because the division of subject in the group is not done randomly, so the control of the confounding variable is very weak (Saryono, 2008).

The population of this study were all patients with mental disorders violence behavior treated inpatient room Installation of Mental Health Service Banyumas Hospital in December 2014 amounted to 118 patients. The sample that will be used in this research is mental patients with risk of violence behavior as many as 30 people consisting of supportive therapy group as much 15 people and group of aerobic gymnastics therapy as many as 15 people. The sampling technique is using purposive sampling. Interventions were conducted in 2 sessions each held for 2 weeks, with 1 week for assessment observation as pre test data. Data analysis technique using t test dependent (paired t test) Banyumas Hospital based on gender, age, education level and year of incidence are presented in the following table.

Table 1 Characteristics of Respondents (n = 30)
Characteristics of Supportive Therapy Aerobic Gymnastics

Characteristics	Supportive therapy	Aerobic
Sex		
male	9 (60,0%)	11 (73,3%)
female	6 (40,0%)	4 (26,7%)
Age (Year)		
< 20	2 (13,3%)	4 (26,7%)
20 – 29	3 (20,0%)	5 (33,3%)
30 – 39	5 (33,3%)	6 (40,0%)
40 – 49	4 (26,7%)	0 (0,0%)
> 49	1 (6,7%)	0 (0,0%)
Education		
Junior (SD)	6 (40,0%)	5 (33,3%)
Intermediate (SMP)	4 (26,7%)	5 (33,3%)
High (SMA)	5 (33,3%)	5 (33,3%)
Hospital sign in history		
1 time	1 (6,7%)	4 (26,7%)
2 times	6 (40,0%)	5 (33,3%)
3 times	7 (46,7%)	3 (20,0%)
4 times	1 (6,7%)	3 (20,0%)

Based on Table 1 it can be seen the gender of the respondents most of the good men in the supportive therapy group (60.0%) or aerobic exercise group (73.3%). The respondent's age was mostly between 40-49 years in both groups. In the supportive therapy group that is 33.3% and the aerobic exercise group is 40.0%. The respondent's education in the supportive therapy group was mostly elementary school (40.0%) and in the aerobic aerobic group distributed evenly for the elementary, junior and senior high school

education respectively 33,3%. The admission history of RSJ in the supportive therapy group was 3 times (46.7%) and for the aerobic exercise group 2 times (33.3%).

2. Scores of self-control aggression in patients with risk of violent behavior before and after supportive therapy Aggression self-control scores in patients with risk of violent behavior before and after supportive therapy were obtained as follows.

Table 2. Aggression self-control score in patients with risk of violent behavior before and after supportive therapy

Aggression self-control score in patients with risk of violent behavior Before Therapy	Before	After
Maximal	65	58
Minimum	55	40
Average	60,60	48,20
Standard Deviation	3,20	4,57

Based on Table 2 it can be seen that self-control aggression score in patients with risk of violent behavior tends to decrease after supportive therapy. Aggression self-control score before therapy was 60.60 ± 3.20 and after therapy decreased to 48.20 ± 4.57 .

3. Scores of self-control aggression in patients with violent behavior risk before and after aerobic exercise Aggression self-control scores in patients with risk of violent behavior before and after aerobic exercise were obtained as follows.

Table 3. Aggression self-control score in patients with risk of violent behavior before and after aerobic exercise

Aggression self-control score in patients with risk of violent behavior	Before	After
Maximum	65	51
Minimum	55	39
Average	61,00	45,13
Standard Deviation	3,44	3,58

Based on Table 3 it can be seen that self-control aggression score in patients with risk of violent behavior tends to decrease after aerobic exercise. Aggression self-control score before therapy was

61.00 ± 3.44 and after therapy decreased to 45.13 ± 3.58 .

4. Comparison of aerobic exercise and supportive therapy to self-control aggression score in patients with violent behavior risk

The comparison of aerobic exercise and supportive therapy to aggression self-control score on patients with risk of violent behavior was analyzed by using t test dependent and independent. Previously tested the normality of data to test the requirements of the use of t test. The results of normality test using Kolmogorov-Smirnov test obtained normal data results. The result is known from the p value greater than $\alpha =$

0.05 for both pre-and post-therapy data in both groups.

The results of statistical analysis of the comparison of aerobic exercise and supportive therapy to self-control aggression score in patients with the risk of violent behavior are presented in the following table.

Table 4. T test dependent and independent analysis of comparison of aerobic exercise and supportive therapy to self-control aggression score in patients with risk of violent behavior

Therapy	Aggression Self-Control score	t count	P
Supportive Before	60,60 ± 3,20	10,18	0,00 0
After	48,20 ± 4,57		
Aerobic Before	61,00 ± 3,44	13,193	0,00 0
After	45,13 ± 3,58		
Supportif and Aerobik Before		-0,329	0,74 4
After		2,045	0,05

Based on Table 4 it can be seen that aggression score of self-control in supportive group tended to be lower after therapy. T test dependent test results obtained p value = 0.000, it means there is a difference score aggression self-control before and after do supportive therapy.

Based on Table 4 it can be seen that the score of aggression self-control in the group of aerobic gymnastics therapy tend to be lower after the therapy. T test dependent test results obtained p = 0,000, meaning there is a difference score aggression self-control before and after aerobic exercise therapy.

Based on table 4 can be seen the results of comparison test aggression self-control score between supportive therapy groups and aerobic exercise therapy before the therapy obtained p value = 0.744 and after the therapy obtained p value = 0.05. These results showed no difference in self-control aggression score between supportive therapy groups and aerobic exercise therapy.

DISCUSSION

1. Respondent's characteristic

Based on Table 1 it can be seen the gender of the respondents most of the good men in the supportive therapy group (60.0%) or aerobic

exercise group (73.3%). The results of research Darmojo et al (1999 in, Wiranata, 2010) explained that women are better prepared in dealing with problems than men, because women are better able to deal with problems than men who tend to be more emotional. According to Kaplan and Sadock (1998, in Sunarto, 2007) that the risk factor for violent behavior is male gender. The results of this study differ in line with the results of research Nofiansyah and Dwi (2014) who found the most respondents in this study were 60 men of male gender or 75%.

Based on Table 1 it can be seen that most respondents age between 40-49 years in both groups. In the supportive therapy group that is 33.3% and the aerobic exercise group is 40.0%. The results of this study differ from the results of research Nofiansyah and Dwi (2014) who found the largest respondents aged 26-35 years as many as 41 respondents or 51.3% and the smallest respondents aged 16-25 years as many as 16 respondents or 20.0%.

Based on Table 1 it can be seen that respondent education on supportive therapy group mostly educated elementary school (40.0%) and in group of aerobic gymnastic distributed evenly for elementary, junior and senior high school education respectively 33,3%. Characteristics of education affect in the incidence of violent behavior. Education can affect a person's behavior on his lifestyle, especially in motivating for participatory attitudes in community development (Keliat, 2003). The results of this study are in line with the results of the study of Sasmaida et al. (2013), which shows that most of the last education respondents are SMA as many as 17 respondents (51.5%).

Based on Table 1 it can be seen that the RSJ admission history in the supportive therapy group was 3 times (46.7%) and for the aerobic exercise group twice (33.3%). The success of nurses in hospitals in providing healing assistance for psychiatric patients will be useless

if not continued at home which then resulted in the patient should be treated again (relapse). Family participation since the beginning of hospitalization will improve the ability of families to care for patients at home so that the possibility of relapse can be prevented. One of the factors causing the recurrence of mental disorder is the lack of family participation in the care of family members who suffer from the disease, because the family does not know how to handle the behavior of patients at home. Families rarely follow the nursing process of patients because they rarely visit the patient at home saki, (Nurdiana, 2007).

2. Scores of self-control aggression in patient with risk of violent behavior before and after supportive therapy

Based on Table 2 it can be seen that self-control aggression score in patients with risk of violent behavior tends to decrease after supportive therapy. Aggression self-control score before therapy was 60.60 ± 3.20 and after therapy decreased to 48.20 ± 4.57 .

One model of psychosocial therapy that is often used in the community and hospital is the therapy group supportive activities because in the group interaction with each other and influence each other so that formed a social system that interact and become a place of clients practice new behaviors adaptive to improve Old maladaptive behavior (Christopher, 2011).

Klingberg's (2010) study suggests that therapeutic relationships in schizophrenic patients with other cases become highly empowered. Supportive group activity therapy is used as a support in order to control non-specific elements of therapeutic contact. The Mail Research, (2012) concluded there were significant differences in the ability to control violent behavior before and after TAK stimulation of perception.

3. Scores of self-control aggression in patients with violent behavior risk before and after aerobic exercise

Based on Table .3 it can be seen that self-control aggression score in patients with risk of violent behavior tends to decrease after aerobic exercise. Aggression self-control score before therapy was 61.00 ± 3.44 and after therapy decreased to 45.13 ± 3.58 .

Aerobic aerobics is a gymnastics by relying on energy distribution and balanced oxygen absorption so that it can increase endorphins that have a relaxed effect that can reduce the risk of violence effectively (Yulistanti, 2003).

The results of this study are in line with research conducted by Akhmad et al, (2011) which showed a decrease in the score of aggression self-control in patients with the risk of violent behavior after aerobic low impact gymnastics therapy in Space

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the study and discussion, it can be concluded that there is a difference of self-control aggression score before and after supportive therapy ($p = 0,000$), as well as on aerobic exercise therapy ($p = 0,000$). There was no difference in aerobic exercise and supportive therapy on aggression self-control scores in patients with violent behavior risk ($p = 0.05$).

Based on the results of the above research, can be given suggestions as follows:

1. For the Hospital

Supportive therapy and aerobic exercise can be used as non-pharmacological therapy in lowering the aggression score of self-control in mental disorder patients with violent behavior.

2. For Patient Family

The patient's family should be able to follow the non-pharmacological treatment process, so that it can help the patient at home if it is allowed to go home to prevent the patient from recurring.

3. For Further Researchers

This research can be further developed, involving the patient's family as a therapist.

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