

# CHANGES IN THE SIGNS, SYMPTOMS, AND ANGER MANAGEMENT OF PATIENTS WITH A RISK OF VIOLENT BEHAVIOR AFTER RECEIVING ASSERTIVE TRAINING AND FAMILY PSYCHOEDUCATION USING ROY'S THEORETICAL APPROACH: A CASE REPORT

Yanuar Fahrizal<sup>1\*</sup>, Mustikasari Mustikasari<sup>2</sup>, Novy Helena Catharina Daulima<sup>2</sup>

1. School of Nursing, Faculty of Medicine and Health Science, Universitas Muhammadiyah Yogyakarta, Yogyakarta 55183, Indonesia
2. Faculty of Nursing Universitas Indonesia, Depok 16424, Indonesia

\*E-mail: yanuarfahrizal@umy.ac.id

---

## Abstract

Mental disorders are predicted to increase every year. Patients with severe mental disorders, such as schizophrenia, often engage in violent behavior. The treatment of such patients can use general nursing treatments (anger management with physical therapy, taking medicines regularly, and verbal and spiritual methods) and specialist nursing interventions (assertive training and family psychoeducation). This case report involved 11 patients, with the majority aged between 26 and 60 years, unemployed, high school graduates, unmarried, and with previous inpatient history. Generalist and specialist nursing interventions (assertive training and family psychoeducation) use Roy's adaptation theory and Stuart's stress adaptation approach. Nursing interventions were conducted sequentially, starting with generalist nursing interventions, followed by specialist ones. The method used was a pre–posttest in which each patient received generalist and specialist nursing interventions, assertive training, and family psychoeducation, each consisting of five sessions. Results of assertive training therapy and family psychoeducation showed a decrease in the signs and symptoms of violent behavior as well as an improvement in the patient's ability to overcome the risk of violent behavior. The application of Roy's adaptation theory and Stuart's stress adaptation approach is potentially appropriate for the treatment of patients with a risk of violent behavior.

**Keywords:** assertive training, family psychoeducation, risk for violence, schizophrenia

## Abstrak

**Perubahan Tanda, Gejala, dan Manajemen Marah pada Pasien dengan Risiko Perilaku Kekerasan Setelah Menerima Pelatihan Asertif dan Psikoedukasi Keluarga Menggunakan Pendekatan Teori Roy: Studi Kasus.** Gangguan jiwa secara keseluruhan diprediksikan akan semakin meningkat setiap tahunnya. Pasien dengan masalah gangguan jiwa berat seperti skizofrenia seringkali melakukan perilaku kekerasan. Penanganan pasien dengan perilaku kekerasan dapat menggunakan tindakan keperawatan generalis (mengontrol marah dengan cara fisik, minum obat teratur, cara verbal dan cara spiritual) dan tindakan keperawatan spesialis (latihan asertif dan psikoedukasi keluarga). Laporan kasus ini melibatkan 11 pasien dengan karakteristik mayoritas usia 26–60 tahun, tidak bekerja, tingkat pendidikan SMA, belum menikah, dan memiliki riwayat dirawat sebelumnya. Tindakan keperawatan yang diberikan adalah tindakan keperawatan generalis dan ners spesialis latihan asertif dan psikoedukasi keluarga dengan menggunakan pendekatan teori adaptasi Roy dan adaptasi stress Stuart. Tindakan keperawatan dilakukan secara berurutan/ bertahap dimulai dengan tindakan keperawatan generalis kemudian dilanjutkan dengan tindakan keperawatan ners spesialis. Metode yang digunakan adalah pre–posttest dimana setiap pasien mendapatkan tindakan generalis serta tindakan ners spesialis latihan asertif dan psikoedukasi keluarga yang masing-masing terdiri dari 5 sesi. Hasil penerapan terapi latihan asertif dan psikoedukasi keluarga menunjukkan terjadinya penurunan tanda dan gejala risiko perilaku kekerasan serta terjadinya peningkatan kemampuan pasien dalam mengatasi risiko perilaku kekerasan. Penggunaan pendekatan teori adaptasi Roy dan teori adaptasi stress Stuart berpotensi sesuai diterapkan pada penanganan pasien dengan risiko perilaku kekerasan.

**Kata Kunci:** latihan asertif, psikoedukasi keluarga, risiko perilaku kekerasan, skizofrenia

---

## **Introduction**

The number of patients with mental disorders worldwide is estimated at 450 million, with adults accounting for 10% (WHO, 2009); this number is predicted to increase every year. Major mental disorders that are prevalent in ASEAN countries include psychotic disorders, such as schizophrenia, followed by bipolar disorder and depression (ASEAN, 2016). Based on the 2013 basic health research data in Indonesia, 0.17% of 240 million people in Indonesia suffer from severe mental disorders or schizophrenia. In West Java, the number of people with severe mental disorders accounts for 0.16% of the total population with mental disorders (National Institute of Health Research and Development, 2013).

Schizophrenia is a psychotic or psychiatric reaction characterized by setbacks in cognition, feelings, perceptions, and abnormal behavior that affect the genetic, physical, social, and cultural aspects of an individual (Videbeck, 2011; Varcarolis, 2014). These setbacks can cause patients with schizophrenia to commit violent behavior because they cannot control their emotions, mind, and behavior. Many families hide their family members who have mental disorders at home for several years and only bring them to the hospital when they cannot take care of them or when the patient behaves aggressively or acts violently.

WHO (2009) states that 1.6 million people have died due to violent behavior. Victims of violent behavior include family members or close friends. Based on the data of patients treated from February 13 to April 14, 2017 in Marzoeeki Mahdi Hospital, a total of 344 patients, especially those in the Bratasena ward, were with a risk of violent behavior. The patients in the Bratasena ward had received generalist nursing interventions by the ward nurses.

Patients who demonstrate violent behavior are treated using generalist nursing interventions by nurses in hospitals. The administration of

generalist nursing interventions can help reduce the cognitive, social, and physical signs and symptoms of patients with a risk of violent behavior and improve their ability to manage such risk (Komala, Keliat & Wardani, 2016; Wahyuningsih, Keliat & Hastono, 2011). Patients with a risk of violent behavior, in addition to requiring generalist nursing interventions, should also be given interventions by specialist nurses in the form of assertive exercise psychotherapy and family psychoeducation.

Assertive training is an act of training someone to achieve assertive behavior (Sadock & Sadock, 2013). Assertive communication is an ability to talk and interact by paying attention and respecting the rights and opinions of others without ignoring personal rights, needs, and limitations (Pipas & Jaradat, 2010). Assertive behavior training includes practicing direct communication with others, daring to say no to unreasonable requests, being able to express objections and appreciation appropriately, and receiving praises properly (Stuart, 2013).

Patients with severe mental disorders, such as schizophrenia can put a burden on themselves and their families. Maladaptive behavioral problems in patients also increase family stress levels (Shah & Latoo, 2010). Family intervention, in the form of family psychoeducation, is needed to manage stress and family burdens. Family psychoeducation can improve patient symptoms and social functioning, overcome family burdens, and provide family coping strategies. Family psychoeducation can enhance the experience of taking care of the patient and the quality of life and can reduce the stress of family members (Udechuku et al., 2015).

Generalist and specialist nursing interventions are performed using theory of Roy's adaptation and Stuart's stress adaptation. Roy's adaptation theory views humans as a system that is always interrelated with their environment to achieve adaptation. Roy explains that the reciprocal relationship is divided into four parts, namely, input (focal, contextual, and residual

stimuli), control processes (coping mechanisms regulated by regulators and cognators), effectors (physiological functions, self-concept, role functions, and interdependence), and output (adaptive or maladaptive). Roy's adaptation theory combined with Stuart's stress adaptation theory fits well with the biopsychological component found in predisposing and precipitation factors, assessment of stress, and the coping sources and mechanisms of patients. Stuart's adaptation theory holds that mental disorders can emerge due to biological, psychological, and socio-cultural aspects. These three aspects are found in predisposing and precipitation factors. In the assessment of Stuart's stress adaptation theory, precipitation factors seem to trigger a problem; this finding is in accordance with the focal stimulus in Roy's adaptation theory and the predisposing factor as a contextual stimulus. Nursing planning and intervention involve cognators and regulators that are included in individual coping mechanisms. Nursing interventions that are in accordance with planning produce output in the form of adaptive behavior.

The combination of Roy's adaptation theory (input, process control, effector, and output) with Stuart's stress adaptation theory can potentially be applied in the Bratasena Ward of Marzoeeki Mahdi Hospital as a maintenance inpatient ward starting from the assessment stage which is a form of applying the input stages to Roy's theory therein are focal, contextual and residual stimuli. Focal stimuli are those that must be faced directly by the client; such stimuli, including biological, sociocultural, and psychological factors, are under study. Contextual stimuli are those that result from focal stimuli, and its biological, psychological, and sociocultural predisposing factors should be studied. Nursing planning involves the application of the stages of the control process, the implementation of nursing interventions, and the evaluation of results as output. Patients in the Bratasena ward are diagnosed with nursing problems of risk of violent behavior. These patients have begun to interact with others and are prone to conflict.

They are also in the process of preparation for discharge from the hospital. Through assertive training and family psychoeducation, patients are expected to be able to behave adaptively, as exhibited by a decrease in the signs and symptoms of risk of violent behavior and an increase in the patient's ability to overcome the problem of such risk.

This case report aims to present the changes in the signs, symptoms, and ability of patients to manage the risk of violent behavior after being given assertive exercise therapy and family psychoeducation using Roy's theoretical approach.

### **Case Illustration**

The Bratasena ward in the Marzoeeki Mahdi Hospital is a third-class male inpatient/ recovery ward. The patients in this ward have a risk of violent behavior. The problems and diagnoses of the risk of violent behavior are determined through an assessment using the advanced mental assessment scanning device developed by the Faculty of Nursing of Universitas Indonesia and an assessment of patient symptoms, which consist of cognitive, affective, physiological, behavioral, and social aspects that have been used in many previous studies. Generalist and specialist nursing interventions are conducted sequentially.

Patients in the Bratasena ward of Marzoeeki Mahdi Hospital only receive generalist nursing interventions and not specialist ones; thus, the author felt the need to provide the latter. Specialist nursing interventions include assertive exercise therapy and family psychoeducation.

The 11 patients included in this case report are diagnosed with risk of violent behavior and have received specialist nursing interventions in the form of assertive exercise therapy, with four patients receiving family psychoeducation interventions. This case report uses Roy's adaptation theory and Stuart's stress adaptation theory in handling the cases. The first thing to do in accordance with Roy's and Stuart's theory

Table 1. Distribution of Patient Characteristics in The Bratasena Ward (n= 11)

| Characteristics       | n  | %     |
|-----------------------|----|-------|
| Education             |    |       |
| a. None               | 1  | 9.09  |
| b. Elementary School  | 1  | 9.09  |
| c. Junior High School | 1  | 9.09  |
| d. Senior High School | 8  | 72.72 |
| Profession            |    |       |
| a. Working            | 1  | 9.09  |
| b. Not working        | 10 | 90.9  |
| Marital Status:       |    |       |
| a. Unmarried          | 9  | 81.81 |
| b. Married            | 1  | 9.09  |
| c. Widow/ Widower     | 1  | 9.09  |
| No. Admission         |    |       |
| a. 1                  | 3  | 27.27 |
| b. >1                 | 8  | 72.72 |
| Illness Duration      |    |       |
| a. <1 year            | 4  | 36.36 |
| b. 1–5 years          | 2  | 18.18 |
| c. >5 years           | 5  | 45.45 |

is to conduct a study. The process of assessing patients is into the input section. Studies on patients include patient demographic data, focal stimuli (precipitation factors in the form of biological, psychological, and sociocultural factors), contextual stimuli (predisposing factors, consisting of biological, psychological, and sociocultural factors), and residual stimuli (Stuart, 2013; Alligood, Hamid & Ibrahim, 2017).

The results of the assessment of the input of the 11 patients show that all the patients are adults (26–60 years old). The patients' characteristics are presented in Table 1.

Table 1 shows that the eight patients with the highest risk of violent behavior have the highest level of education of senior high school (72.72%). Ten patients (90.9%) are unemployed. Nine patients (81.81%) are unmarried. Based on the number of admissions, eight patients (72.72%) have already been admitted to the hospital more than once. Based on the duration of illness, five patients (45.45%) have been sick for more than 5 years.

Subsequent studies were conducted to investigate focal stimuli (precipitation factors), contextual stimuli (predisposing factors), and residuals. The results of the assessment of predisposing and precipitation factors are shown in Tables 2 and 3.

Table 2 shows that majority of the biological predisposing factors are the history of previous mental disorders and smoking by 10 patients (90.9%) respectively. The majority of psychological factors are unpleasant experiences and parenting (authoritarian/permissive) by 11 people (100%) respectively. Then, the most sociocultural factors are losing some special by 10 patients (90.9%).

Table 3 shows that majority of biological precipitation factors are stopping medication by 9 patients (81.18%), the most psychological precipitation factors are the presence of unpleasant experiences by 10 patients (90.9%), and the most sociocultural factors the most are not working by 10 patients (90.9%). The results of contextual stimulus assessment (biological, psycho-

logical, and sociocultural predisposing factors) show that 11 patients (100%) are influenced by psychological predisposing factors, namely, un-

pleasant experiences and authoritarian/permissive parenting. Meanwhile, those of the focal stimulus assessment (biological, psychological,

Table 2. Distribution of Biological, Psychological, and Sociocultural Predisposing Factors of Patients in The Bratasena Ward (n= 11)

| Predisposing Factors                   | Yes |       | No |       |
|--|-----|-------|----|-------|
|  | n   | %     | n  | %     |
| <b>Biological Factors</b>              |     |       |    |       |
| a. History of Previous Mental Disorder | 10  | 90.9  | 1  | 9.09  |
| b. Previous Hospitalization            | 8   | 72.72 | 3  | 27.27 |
| c. Smoking                             | 10  | 90.9  | 1  | 9.09  |
| d. Use of Drugs                        | 8   | 72.72 | 3  | 27.27 |
| e. Genetic                             | 6   | 54.54 | 5  | 45.45 |
| f. Head Injury                         | 9   | 81.81 | 2  | 18.18 |
| g. Chronic Disease                     | 1   | 9.09  | 10 | 90.9  |
| <b>Psychological Factors</b>           |     |       |    |       |
| a. Introvert                           | 9   | 81.81 | 2  | 18.18 |
| b. Negative Self-Concept               | 10  | 90.9  | 1  | 9.09  |
| <b>Social Factors</b>                  |     |       |    |       |
| a. School Dropout                      | 8   | 72.72 | 3  | 27.27 |
| b. Not working                         | 4   | 36.36 | 7  | 63.63 |
| c. Economic Problem                    | 9   | 81.81 | 2  | 18.18 |
| d. Losing Someone Special              | 10  | 90.9  | 1  | 9.09  |
| e. Conflict of Family/ Environment     | 7   | 63.63 | 4  | 36.36 |
| f. Unmarried                           | 9   | 81.81 | 2  | 18.18 |
| g. Having No Close Friend              | 3   | 27.27 | 8  | 72.72 |
| h. Not Joining Religious Activities    | 9   | 81.81 | 2  | 18.18 |
| i. Not Joining Social Activities       | 8   | 72.72 | 3  | 27.27 |

Table 3. Distribution of Biological, Psychological, and Sociocultural Precipitation Factors of Patients in The Bratasena Ward (n= 11)

| Precipitation Factors              | Yes |       | No |       |
|------------------------------------|-----|-------|----|-------|
|                                    | n   | %     | n  | %     |
| <b>Biological Factors</b>          |     |       |    |       |
| a. Stop Medication                 | 9   | 81.81 | 2  | 18.18 |
| b. Smoking                         | 8   | 72.72 | 3  | 27.27 |
| c. Use of Drugs                    | 2   | 18.18 | 9  | 81.81 |
| <b>Psychological Factors</b>       |     |       |    |       |
| a. Unpleasant Experience           | 10  | 90.9  | 1  | 9.09  |
| b. Unfulfilled Desire              | 3   | 27.27 | 8  | 72.72 |
| <b>Social Factors</b>              |     |       |    |       |
| a. School Dropout                  | 3   | 27.27 | 8  | 72.72 |
| b. Not working                     | 10  | 90.9  | 1  | 9.09  |
| c. Economic Problem                | 9   | 81.81 | 2  | 18.18 |
| d. Losing Someone Special          | 1   | 9.09  | 10 | 90.9  |
| e. Conflict of Family/ Environment | 7   | 63.63 | 4  | 46.46 |
| f. Unmarried                       | 9   | 81.81 | 2  | 18.18 |

Table 4. Signs and Symptoms of Patients with A Risk of Violent Behavior (n= 11)

| Signs and symptoms                          | Pre      |         | Post     |         | Decrease<br>n |
|---|----------|---------|----------|---------|---------------|
|   | Yes<br>n | No<br>n | Yes<br>n | No<br>n |               |
| <b>Cognitive Aspect</b>                     |          |         |          |         |               |
| a. Unable to Control Violent Behavior       | 8        | 3       | 0        | 11      | 8             |
| b. Negative Thinking in Dealing with Stress | 11       | 0       | 3        | 8       | 8             |
| c. Flight of idea                           | 5        | 6       | 2        | 9       | 3             |
| d. Dominating Conversation                  | 8        | 3       | 2        | 9       | 6             |
| e. Blaming Others                           | 7        | 4       | 3        | 8       | 4             |
| f. Wanting to Beat Others                   | 6        | 5       | 0        | 11      | 6             |
| g. Introvert                                | 5        | 6       | 1        | 10      | 4             |
| h. Aggressive                               | 1        | 10      | 0        | 11      | 1             |
| <b>Affective Aspect</b>                     |          |         |          |         |               |
| a. Angry                                    | 1        | 10      | 0        | 11      | 1             |
| b. Labile Affect                            | 10       | 1       | 8        | 3       | 2             |
| c. Feeling Annoyed                          | 9        | 2       | 0        | 11      | 9             |
| d. Feeling Insecure and Uncomfortable       | 2        | 9       | 0        | 11      | 2             |
| e. Easily Offended                          | 4        | 7       | 0        | 11      | 4             |
| f. Suspicious                               | 8        | 3       | 4        | 7       | 4             |
| g. Underestimating Something                | 1        | 10      | 0        | 11      | 1             |
| h. Less Confident                           | 1        | 10      | 0        | 11      | 1             |
| <b>Physiological Aspect</b>                 |          |         |          |         |               |
| a. Looking Sharply                          | 7        | 4       | 1        | 10      | 6             |
| b. Holding Jaws Firmly                      | 1        | 10      | 0        | 11      | 1             |
| c. Tense Faced                              | 5        | 6       | 1        | 10      | 4             |
| d. Red Faced                                | 3        | 8       | 0        | 11      | 3             |
| e. Making a Fist                            | 1        | 10      | 0        | 11      | 1             |
| f. Headache                                 | 1        | 10      | 0        | 11      | 1             |
| g. Increased Defecating                     | 1        | 10      | 1        | 10      | 0             |
| <b>Behavioral Aspect</b>                    |          |         |          |         |               |
| a. Cynical                                  | 3        | 8       | 1        | 10      | 2             |
| b. Loud Voice                               | 2        | 9       | 0        | 11      | 2             |
| c. Loitering                                | 6        | 5       | 4        | 7       | 2             |
| <b>Social Aspect</b>                        |          |         |          |         |               |
| a. Self-Withdrawal                          | 8        | 3       | 5        | 6       | 3             |
| b. Indifferent to the Environment           | 4        | 7       | 2        | 9       | 2             |

and sociocultural precipitation factors) show that 10 patients (90.9%) are influenced by the sociocultural precipitation factor of not working.

The control process experienced by the patient therein is a coping mechanism. In this section, the author implemented generalist and specialist nursing interventions. All the patients received generalist nursing interventions and as-

sertive training, and four patients received family psychoeducation interventions. The initial data of the signs, symptoms, and ability of patients were collected during initial assessment, that is, before nursing interventions. After specialist nursing interventions, assertive training, and family psychoeducation, final data were collected to determine changes in the signs, symptoms, and abilities of patients.

Table 5. Ability of Patients with A Risk of Violent Behavior (n= 11)

| Ability  | Pre |    | Post |    | Increase |
|--|-----|----|------|----|----------|
|  | Yes | No | Yes  | No |          |
|  | n   | n  | n    | n  | n        |
| a. Physical Method (Taking a deep breath and hitting the pillow) | 8   | 3  | 11   | 0  | 3        |
| b. Taking Medicines  | 11  | 0  | 11   | 0  | 0        |
| c. Verbal Method   | 0   | 11 | 11   | 0  | 11       |
| d. Spiritual Method  | 4   | 7  | 11   | 0  | 7        |
| e. Identifying Cause and Response when Angry                     | 0   | 11 | 11   | 0  | 11       |
| f. Expressing Needs and Desires Assertively                      | 0   | 11 | 11   | 0  | 11       |
| g. Expressing Anger Assertively                                  | 0   | 11 | 11   | 0  | 11       |
| h. Reject Irrational Requests                                    | 0   | 11 | 10   | 1  | 10       |
| i. Accepting and Expressing Differences of Opinions              | 0   | 11 | 6    | 5  | 6        |

The implementation of generalist and specialist nursing interventions, assertive training, and family psychoeducation decreased the signs and symptoms of risk of violent behavior and increased the ability of patients to overcome such risk. In Roy’s adaptation theory, these results are included in the output. Changes in the signs, symptoms, and abilities of the patients are presented in Tables 4 and 5.

Table 4 reveals that the affective aspect, particularly the inability to control violence, wanting to beat others, and being aggressive, obtained the highest decrease (100%) among the signs and symptoms.

Table 5 reveals that verbal ability, particularly identifying causes and responses when angry, expressing needs and desires assertively, and expressing anger assertively, obtained the greatest improvement (100%) among other items.

## Discussion

**Patient Characteristics.** Based on data found in the input (focal, contextual, and residual stimuli), 100% of the patients are aged between 26 and 60 years. Based on Erikson’s stages of development, this age range covers adulthood, the stage of human generativity in which many responsibilities are held; moreover, this stage is characterized by economic stability and good

social interaction. If these characteristics cannot be achieved, then a person can experience dependence in terms of work and finances, thereby causing maladaptive behavior (Keliat, Da-ulima, & Farida, 2011). Mehta, Mehta, and Shah (2016) mentioned that patients with schizophrenia at the age of 25–31 years exhibit physically aggressive behavior more than normal people of the same age. Violent behavior in schizophrenic patients is more common in young adults (Bo et al., 2011; Varshney, Mahapatra, Krishnan, Gupta, & Deb, 2016). Adult patients become more vulnerable to mental disorders and at risk of violent behavior because humans at this age are in a stage of having big responsibilities and high stress level.

The risk of violent behavior is highest (72.72%) in patients with a high school education level. Oladepo, Yusuf, and Arulogun (2011) stated that violent behavior is high for people with high school education. This finding is related to a person’s coping abilities in dealing with stress. A person with a high level of education is more likely to be able to think of various strategies to manage problems rather than taking a form of resistance, such as violent behavior.

Ten (90.9%) of the patients are unemployed. Zhang and Bhavsar (2013) stated that someone who is unemployed has an increased risk of developing mental disorders. Poverty is related

to insecurity, lack of education level, inadequate housing, and malnutrition, which can affect the emergence of mental disorders (Kuruvilla & Jacob, 2007). This finding is related to the role of men in providing for the family. If a man is unemployed, then feelings of inferiority, shame, and social withdrawal emerge, ultimately leading to mental disorders and risk of violent behavior.

Nine (81.81%) of the patients are unmarried. Loneliness is an important factor in the etiology of mental disorders (Martens, 2010). The risk of violent behavior increases in unmarried patients (Bowers et al., 2011). Being an unmarried adult is a stressor. Stressors that are not handled properly increase a person's risk of self-withdrawal, and if they feel threatened, then they resort to violent resistance physically and psychologically.

**Predisposing Factors.** Predisposing factors can consist of modifiable and nonmodifiable risk factors (Samy, Khalaf & Low, 2015). Violent behavior reflects various biological, psychodynamic, and social factors (Rueve & Welton, 2008).

Data on biological predisposing factors show that majority of the patients have a history of previous mental disorders and smoking behavior (90.9%). Smoking prevalence in patients with schizophrenia is higher than that in patients with other mental disorders and the general population (De Leon & Diaz, 2005; Zhang et al., 2012; Royal College of Physicians & Royal College of Psychiatrists, 2013; Yee et al., 2014). A major factor that influences smoking is addiction (Ahmed et al., 2014). Smoking behavior appears as an individual coping mechanism to deal with stress and boredom, whereas with smoking, patients need high doses of antipsychotics.

Smoking behavior increases when a patient is discharged from the hospital; thus, the drugs brought from the hospital become less therapeutic and increase the occurrence of violent

behavior. Some patients with violent behavior have a history of violent behavior/mental disorders. Mehta and Shah (2016) mentioned that patients with experiences of hospitalization because of violent behavior show more verbal and physical aggressive behavior compared with those who have not been hospitalized. Other predisposing factors are psychological factors.

Data on psychological predisposing factors show that for all the patients (100%), violent behavior is caused by unpleasant experiences and parenting. Keyes, Pratt, Galea, and McLaughlin (2014) stated that the unexpected death of a close person is the most common traumatic experience and is deemed as the worst experience. Conflicts cause a traumatic experience that can affect a person's mental health and his cognitive, emotional, social, and behavioral aspects, thus causing violent behavior (Rueve & Welton, 2008; Hassan et al., 2015).

A number of 90.9% of the sociocultural factor is most commonly found in the loss of a special/loved one. The loss of a loved one, which is related to the grieving process, is one of the factors that cause mental disorders. Delalibera et al. (2015) stated that family conflicts make the grieving process complex and prolonged. Loss is an actual/potential situation in which a valuable change no longer exists (Kozier, Erb, Berman & Snyder, 2011). The grieving reaction is influenced by culture, age, and time when loss occurs (Howarth, 2011). Traumatic loss is a risk factor of PTSD, depression, complex grieving, and deviant behavior (crime and drug abuse), which result in mental disorders and violent behavior in low economic groups (Smith, 2014). Grieving periods are associated with an increased risk of the onset of various mental disorders (Keyes et al., 2014).

**Precipitation Factors.** The biological precipitation factor mostly found is the medication stop by 9 patients (81.81%). A significant relationship was observed between patients' violent behavior and noncompliance with medication (Aldridge, 2011; Witt, Dorn & Fazel, 2012).

Noncompliance with medication is also associated with poor outcomes, prolonged hospitalization, violent behavior, suicide, and death.

The psychological precipitation factor was found in an unpleasant experience by 10 patients (90.9%). This result is consistent with the statement that victims of violent behavior or sexual harassment from a spouse or parent have an increased risk of violent behavior (World Health Organization & PAHO, 2012; Wilkins et al., 2014).

The sociocultural precipitation factor is mostly in not working by 90.9%. The unemployed condition of patients is closely related to low economic problems. Furthermore, patients with low socioeconomic levels tend to exhibit physically violent behavior (Mehta et al., 2016). Patients often have difficulty being hired due to the stigma that patients with mental disorders cannot work, are ashamed, and have to rest at home.

## Process

*Patient Ability.* Generalist and specialist nursing interventions are conducted in stages where the first generalist intervention precedes. Assertive training interventions by specialist nurses can be completely administered and have a positive effect because assertive training is a communication therapy that focuses on developing assertive behavior in patients. Keliat, Totoliu, Daulima, and Erawati (2015) mentioned that assertive training therapy is strongly related to assertive knowledge and assertive behavior before and after assertive training. Assertive training therapy increases the ability of clients to overcome the problem of violent behavior (Wahyuningsih et al., 2011). Alini (2010) reported a decrease in the symptoms of violent behavior and an increase in the ability to control violent behavior of clients who receive assertive training and progressive muscle relaxation. In generalist nursing interventions, patients are trained to control anger. Anger management is administered through physical therapy, medication, and verbal and spiritual methods. Assertive training plays a role in in-

creasing a patient's ability to communicate with others and solve problems without harming others.

*Family Ability.* In addressing this case, the challenge lies in the fact that not all patients are visited by their families; thus, family intervention is not optimal. Nursing interventions that focus on the family can have a positive effect not only on the patient but also the family. Udechuku et al. (2015) mentioned that interventions that focus on the family can improve the experience of caring and the quality of life and reduce psychological stress due to caring for sick family members. Families who receive family psychoeducation increase cognitive, affective, and psychomotor abilities (Gajali, Mustikasari & Putri, 2014; Wiyati, Hamid & Gayatri, 2009). Family psychoeducation can significantly reduce family burden and increase the ability of families to care for patients (Wardaningsih, Keliat, & Daulima, 2007; Sari, Keliat, & Mustikasari, 2009).

As a family-focused therapy, family psychoeducation can reduce the incidence of relapses and hospitalizations, as well as increase patient compliance with medication, improve the ability of family coping strategies, and reduce family burden (Fiorillo et al., 2013). Family psychoeducation also increases knowledge about the illness and health resources (Pasadas & Manso, 2015).

## Output

*Changes in Signs and Symptoms.* Decreased signs and symptoms occur in the cognitive, affective, physiological, behavioral, and social aspects. The highest decrease (100%) in cognitive signs and symptoms is found in the inability to control violent behavior, wanting to hit others, and being aggressive. In the affective aspect, the highest decrease (100%) is found in anger, annoyance, feeling uncomfortable, being easily offended, underestimating something, and lacking confidence. In the physiological aspect, the highest decrease (100%) is found in jaws closed tightly, red face, hand in

fist, and headache. In the behavioral aspect, the highest decrease (100%) is found in loud voice. In the social aspect, self-withdrawal by 37%.

The administration of generalist nursing interventions can help reduce cognitive, social, and physical signs and symptoms of patients with a risk of violent behavior and increase the ability to control such behavior (Wahyuningsih et al., 20; Komala, Keliat & Wardani, 2016).

Patients in the calm stage are recommended for psychosocial interventions, such as assertive training, to improve patient care outcomes for the risk of violent behavior because it is proven effective (Mancini et al., 2009). Patients with violent behavior feel they have the power to compensate for feelings of helplessness and anxiety and usually have limited ability to overcome the frustrations they face and sometimes their violent behavior to meet their needs (Queensland Government, 2010). Assertive training teaches patients to meet their needs based on priorities and in an assertive manner.

Assertive training focuses on training patients to communicate with others. Koolae, Baighi, and Navidian (2015) stated that the quality of life of patients improves, and aggressive behavior decreases remarkably after receiving communication training interventions. Assertive training can reduce anxiety, aggression, and fatigue in social interactions among patients (Mousa, Imam & Sharaf, 2011; Karimi, Mahmoodi & Hashemi, 2014). Sodikin, Wihastuti, and Supriati (2015) said assertive training can reduce the signs and symptoms of violent behavior, thus shortening the acute phase.

The decrease in signs and symptoms is also influenced by family psychoeducation. Family psychoeducation therapy focuses on handling communication problems in the family, lack of information about the illness, and lack of skills in dealing with conflicts (Volavka, 2013). Family psychoeducation involves a multi-dimensional viewpoint that covers family, social, biological, and psychopharmaceutical aspects;

information and support and strategy management is provided to the family (Economou, 2015). Family psychoeducation can also help families and friends in preventing the development of negative behavior among patients due to stigma or stereotypes (Bhattacharjee et al., 2011). Family psychoeducation has a positive effect on the family.

Family psychoeducation not only benefits the family but also the patient by reducing recurrence and violent behavior (Batista, Baes & Juruena, 2011; Harvey & O'Hanlon, 2013). Rahayu, Hamid, and Sabri (2011) reported that families who receive family psychoeducation improve in their ability to provide psychosocial support to sick family members. Family psychoeducation is much needed by patients to prevent recurrence (Sariah, 2012) because families who receive family psychoeducation can further provide family support to patients in administering the treatment. Desousa, Kurney, and Sonavane (2012) mentioned that family psychoeducation can effectively reduce the incidence of patient recurrence. This finding shows that violent behavior can be controlled in families who receive family psychoeducation because a patient's recurring disorder is evident from his violent behavior. Families who receive family psychoeducation can solve family problems, overcome family burdens, and utilize support resources outside the family; thus, they can treat patients with a risk of violent behavior better than those who do not undergo psychoeducation.

## **Conclusions**

Assertive training therapy and family psychoeducation can reduce the signs and symptoms of the risk of violent behavior and improve the ability of patients to control their anger. Thus, this therapy can be applied in a maintenance ward in accordance with Roy's adaptation and Stuart's stress adaptation theory.

This case report recommends that patients with a risk of violent behavior be given generalist

nursing interventions (controlling anger through physical therapy, regular medication, and verbal and spiritual methods) and assertive training interventions in a sequential/gradual manner.

This case report also recommends that nurses conduct routine health education and family psychoeducation activities every month in the mental ward. Moreover, patients' families should be required to attend.

## Acknowledgement

We express our gratitude to the supervisors for their guidance during the practice of advanced mental nursing clinics, Marzoeki Mahdi Hospital Director, Nursing Department, Diklit and all Bratasena ward nurses for the opportunity given to learn to apply the theory and practice of advanced mental nursing. Thanks to patients and families who have provided opportunities to practice assertive training and family psychoeducation.

## References

- Ahmed, S., Reena, M.D., Nuzhat Hussain, M.D., Ahmed, R., Amin, S., & Ahmed, S. (2014). Nicotine addiction in schizophrenia, availability of better treatment options as are in general population, *Int J Emergency Ment Health Hum Resilience*, 17(1), 156–160.
- Aldridge, M.A. (2011). Addressing non-adherence to antipsychotic medication: A harm-reduction approach. *Journal of Psychiatric and Mental Health Nursing*, 19(1), 85–96.
- Alligood, M.R., Hamid, A.Y., & Ibrahim, K. (2017). *Pakar teori keperawatan dan karya mereka* (Terjemahan, Edisi 8). Singapore: Elsevier.
- Association of Southeast Asian Nations. (2016). *ASEAN mental health systems*. Retrieved from <https://asean.org/storage/2017/02/55.-December-2016-ASEAN-Mental-Health-System.pdf>
- Atri, A., & Sharma, M. (2007). Psychoeducation: Implications for the profession of health education. *Californian Journal of Health Promotion*, 5(4), 32–39.
- Batista, T.A., Baes, C.V.W., & Juruena, M.F. (2011). Efficacy of psychoeducation in bipolar patients: Systematic review of randomized trials. *Psychology & neuroscience*, 4(3), 409–416.
- Bhattacharjee, D., Rai, A.K., Singh, N.K., Kumar, P., Munda, S.K., & Das, B. (2011). Psychoeducation: A measure to strengthen psychiatric treatment. *Delhi Psychiatry Journal*, 14(1), 33–39.
- Bo, S., Abu-Akel, A., Kongerslev, M., Haahr, U. H., & Simonsen, E. (2011). Risk factors for violence among patients with schizophrenia. *Clinical Psychology Review*, 31, 711–726.
- Bowers, L., Stewart, D., Papadopoulos, C., Dack, C., Ross, J., & Khanom, H. (2011). *Inpatient violence and aggression: A literature review*. London: Section of Mental Health Nursing Health Servi and Population research Institute of Psychiatry Kings College London.
- De Leon, J., & Diaz, F.J. (2005). A meta-analysis of worldwide studies demonstrates an association between schizophrenia and tobacco smoking behaviors. *Schizophrenia research*, 76(2–3), 135–157.
- Desousa, A., Kurvey, A., & Sonavane, S. (2012). Family Psychoeducation for Schizophrenia: A clinical review. *MJP Online Early*, 21(2). Retrieved from <https://www.mjpsychiatry.org/index.php/mjp/article/view/196>.
- Delalibera, M., Presa, J., Coelho, A., Barbosa, A., & Franco, M.H.P. (2015). Family dynamics during the grieving process: A systematic literature review. *Ciencia & Saude Colectiva*, 20(4), 1119–1134.
- Douglas, K.S., & Ogloff, J.R. (2003). Violence by psychiatric patients: The impact of archival measurement source on violence base rates and risk assessment accuracy. *Can J Psychiatry*, 48(11), 734–740.

- Economou, M.P. (2015). Psychoeducation: A Multifaceted Intervention. *International Journal of Mental Health*, 44, 259–262.
- Fiorillo, A., Sampogna, G., Del Gaudio, L., Luciano, M., & Del Vecchio, V. (2013). Efficacy of supportive family interventions in bipolar disorder: A review of the literature. *Journal of Psychopathology*, 19, 134–142.
- Gajali, G., Mustikasari, M., & Putri, Y.S.E. (2014). *Pengaruh family psychoeducation therapy terhadap kemampuan keluarga merawat pasien skizofrenia dengan halusinasi di Kota Samarinda Kalimantan Timur* (Master Thesis, Degree in Nursing). Depok: Faculty of Nursing Universitas Indonesia.
- Harvey, C., & O’Hanlon, B. (2013). Family psychoeducation for people with schizophrenia and other psychotic disorders and their families. *Australian & New Zealand Journal of Psychiatry*, 47(6), 516–520.
- Hassan, G., Kirmayer, L.J., MekkiBerrada A., Quosh, C., el Chammy, R., Deville-Stoetzel, J.B., Youssef, A., Jefee-Bahloul, H., Barkeel-Oteo, A., Coutts, A., Song, S. & Ventevogel, P. (2015). *Culture, context and the mental health and psychosocial wellbeing of syrians: A review for mental health and psychosocial support staff working with syrians affected by armed conflict*. Geneva: UNHCR.
- Howarth. R.A. (2011). Concepts and Controversies in Grief and Loss. *Journal of Mental Health Counseling*, 33(1), 4–10.
- Karimi, S., Mahmoodi, M., & Hashemi, L. (2014). Effectiveness of assertiveness group training on reducing anxiety, aggression and burnout. *Journal of Applied Science Research*, 10(5), 370–375.
- Keliat, B.A., Tololiu, T.A., Daulima, N.H.C., & Erawati, E. (2015). Effectiveness assertive training of bullying prevention among adolescents in West Java Indonesia. *International Journal of Nursing*, 2(1), 128–134.
- Keliat, B.A., Daulima.N.H.C., & Farida, P. (2011). *Manajemen keperawatan psikososial & kader kesehatan CMHN (Intermediate Course)*. Jakarta: EGC.
- Keyes, K.M., Pratt, C., Galea, S., McLaughlin, K.A. (2014). The burden of loss: Unexpected death of a loved one and psychiatric disorders across the life course in a national study. *Am J Psychiatry*, 171(8), 864–871.
- Komala, E., Keliat, B.A., Wardani, I.Y. (2016). Efektifitas program edukasi pasien, terapi penerimaan komitmen, psikoedukasi keluarga terhadap insight, tanda, gejala serta kemampuan klien mengontrol perilaku kekerasan (Master Thesis, Degree in Nursing). Depok: Faculty of Nursing Universitas Indonesia.
- Koolae, A.K., Baighi, H.E., & Navidian, A. (2016). Effects of communication skills training on aggression and quality of life of male patients with chronic mental illnesses. *Journal of Client-Centered Nursing Care*, 2(1), 3–10.
- Kozier, B., Erb, G., Berman, A., & Snyder, S. (2011). *Buku ajar fundamental keperawatan konsep proses & praktik* (Edisi 7, Volume 1). Jakarta: EGC
- Kuruvilla, A., & Jacob, K.S. (2007). Poverty, social stress & mental health. *Indian Journal of Med*, 126, 273–278.
- Mancini, A.D., Moser, L.L., Whitley, R., McHugo, G.J., Bond, G.R., Finnerty, M.T., & Burns, B.J. (2009). Assertive community treatment: Facilitators and barriers to implementation in routine mental health settings. *Psychiatric Services*, 60(2), 189–195.
- Martens, W.H.J. (2010). Schizoid personality disorder linked to unbearable and inescapable loneliness. *Eur. J. Psychiat*, 24(1), 38–45.
- Mehta, R.J., Mehta, R.Y., & Shah, N.D. (2016). A case control study of aggressive behavior in stable patients of schizophrenia who have

- improved on treatment and in normal and its effect on quality of life at government medical college surat. *International Journal of Medical Science and Clinical Inventions*, 3(2), 1565–1574.
- Mousa, A.A., Imam, S.A., & Sharaf, A. (2011). The effect of an assertiveness training program on assertiveness skills and social interaction anxiety of individuals with schizophrenia. *Journal of American Science*. 7(12), 454–466.
- National Institute of Health Research and Development, The Ministry of Health Republic of Indonesia. (2013). *Hasil riset kesehatan dasar 2013*. Jakarta: The Ministry of Health Republic of Indonesia.
- Oladepo, O., Yusuf, O.B., & Arulogun, O.S. (2011). Factors influencing gender based violence among men and women in selected states in Nigeria. *African Journal of Reproductive Health*, 15(4), 78–86.
- Pasadas, C., & Manso, F. (2015). Psychoeducation: A strategy for preventing relapse in patients with schizophrenia. *International Journal of Nursing*, 2(1), 89–102.
- Pipas, M.D., & Jaradat, M. (2010). Assertive communication skills. *Annales Universitatis Aqulensis Series Oeconomica*. 12(2), 649–656.
- Queensland Government. (2010). *Queensland Mind essentials*. Queensland: State of Queensland.
- Rahayu, D.A., Hamid, A.Y., Sabri, L. (2011). *Pengaruh psikoedukasi keluarga terhadap dukungan psikososial keluarga pada anggota keluarga dengan penyakit kusta di kabupaten Pekalongan* (Master Thesis, Degree in Nursing). Depok: Faculty of Nursing Universitas Indonesia.
- Royal College of Physicians, Royal College of Psychiatrists. (2013). *Smoking and mental health*. London: RCP.
- Rueve, M.E., & Welton, R.S. (2008). Violence and mental illness. *Psychiatry*, 5(5), 35–48.
- Sadock, B.J., & Sadock, V.A. (2013). *Buku ajar psikiatri klinis edisi 2*. Jakarta: EGC.
- Samy, A.L., Khalaf, Z.F., & Low, W.Y. (2015). Mental health in the asia pacific region: An overview. *International Journal of Behavioral Science*, 10(2), 9–18.
- Sari, H., Keliat., B.A., & Mustikasari, M. (2009). *Pengaruh family psychoeducation therapy terhadap beban dan kemampuan keluarga dalam merawat klien pasung di Kabupaten Bireuen Nanggroe Aceh Darussalam* (Master Thesis, Degree in Nursing). Depok: Faculty of Nursing Universitas Indonesia.
- Sariah, A. (2012). *Factors influencing relapse among patients with schizophrenia in muhimbili national hospital: The perspectives of patients and their caregivers* (Doctoral Dissertation, Degree of Master of Science Nursing). Tansania: Muhimbili University of Health and Allied Sciences
- Shah, A.J., Wadoo, O., & Latoo, J. (2010). Psychological distress in carers of people with mental disorders. *British Journal of Medical Practitioners*, 3(3), a327. Retrieved from <https://www.bjmp.org/content/psychological-distress-carers-people-mental-disorders>.
- Smith, S.S. (2014). Traumatic loss in low-income communities of color. *Focus*, 31(1), 32–34.
- Sodikin, M.A., Wihastuti, T.A., & Supriati, L. (2015). Pengaruh latihan asertif dalam memperpendek fase intensif dan menurunkan gejala perilaku kekerasan di ruang Intensive Psychiatric Care Unit RSJ Dr Radjiman Wediodiningrat. *Jurnal Ilmu Keperawatan*, 3(2), 168–182.
- Stuart, G.W. (2013). *Principles and practice of psychiatric nursing* (10th Ed.). St Louis Missouri: Elsevier Mosby.
- Udechuku, A.Y., Harrison, B., Mayo-Wilson, E., Young, N., Woodhams, P., Shiers, D., ... & Kendall, T. (2015). Interventions to improve the experience of caring for people with severe mental illness: Systematic review and

- meta-analysis. *The British Journal of Psychiatric*, 206(4), 268–274.
- Varcarolis, E.M. (2014). *Psychiatric mental health nursing: A clinical approach*. St. Louis: Elsevier.
- Varshney, M., Mahapatra, A., Krishnan, V., Gupta, R., & Deb, K.S. (2016). Violence and mental illness: what is the true story. *J Epidemiol Community Health*, 70(3), 223–225.
- Videbeck, S.L. (2011). *Psychiatric mental health nursing* (5th Ed.). Lippincott Williams & Wilkins: Wolter Kluwer Health.
- Volavka, J. (2013). Violence in schizophrenia and bipolar disorder. *Psychiatria Danubina*, 25(1), 24–33.
- Wardaningsih, S., Keliat, B.A., Daulima, N.H.C. (2007). *Pengaruh family psychoeducation terhadap beban dan kemampuan keluarga dalam merawat klien dengan halusinasi di kabupaten Bantul Yogyakarta* (Master Thesis, Degree in Nursing). Depok: Faculty of Nursing Universitas Indonesia.
- Wahyuningsih, D., Keliat, B.A., & Hastono, S.P. (2011). Penurunan perilaku kekerasan pada klien skizoprenia dengan assertiveness training. *Jurnal Keperawatan Indonesia*, 14(1), 51–56.
- Wiyati, R., Hamid, A.Y., Gayatri, D. (2009). *Pengaruh psikoedukasi keluarga terhadap kemampuan keluarga dalam merawat klien isolasi sosial* (Master Thesis, Degree in Nursing). Depok: Faculty of Nursing Universitas Indonesia.
- World Health Organization. (2009). *Improving Health System and service for mental health: WHO library cataloging in publication*. Geneva: World Health Organization. Retrieved from [https://apps.who.int/iris/bitstream/handle/10665/44219/9789241598774\\_eng.pdf](https://apps.who.int/iris/bitstream/handle/10665/44219/9789241598774_eng.pdf)
- World Health Organization & PAHO. (2012). *Understanding and addressing violence against women*. Retrieved from [https://apps.who.int/iris/bitstream/handle/10665/77432/WHO\\_RHR\\_12.36\\_eng.pdf](https://apps.who.int/iris/bitstream/handle/10665/77432/WHO_RHR_12.36_eng.pdf)
- Wilkins, N., Tsao, B., Hertz, M.F., Davis, R., & Klevens, J. (2014). *Connecting the dots: an overview of the links among multiple forms of violence*. Retrieved from [https://stacks.cdc.gov/view/cdc/31552/cdc\\_31552\\_DS1.pdf](https://stacks.cdc.gov/view/cdc/31552/cdc_31552_DS1.pdf)
- Witt, K., Dorn, R.V. & Fazel, S. (2013). Risk factors for violence in psychosis: systematic review and meta-regression analysis of 110 studies. *PLoS ONE*, 8(2), 1–15.
- Yee, A., Mohamed, B.N., Nasyrah, N., Binti Hashim, A.H., Loh, H.S., Singh, H., ... & Jambunathan, S.T. (2015). The effect of nicotine dependence on psychopathology in patients with schizophrenia. *BioMed Research International*, 2015, 1–6.
- Zhang, S., & Bhavsar, V. (2013). Unemployment as a risk factor for mental illness: combining social and psychiatric literature. *Advances in Applied Sociology*, 3(2), 131–136.
- Zhang, X.Y., Liang, J., Da Chun Chen, M.H. X., He, J., Cheng, W., Wu, Z., ... & Kosten, T.A. (2012). Cigarette smoking in male patients with chronic schizophrenia in a Chinese population: Prevalence and relationship to clinical phenotypes. *PLoS ONE*, 7(2), 1–6.