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# Family Care Model Development in Treating Schizophrenia Patients that Have Self-Deficit Nursing Based System: Structural Equation Modeling Analysis

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**Abstract**---The purpose of this study is to develop a family care model in treating schizophrenia patients who experience self-deficit based on the nursing system during the COVID-19 pandemic. Explanatory research design with cross-sectional approach. The population in this study were all families of schizophrenic patients in two mental health institutions in Bangkalan, Indonesia with a total sample of 72 families. The research instrument used was a re-control checklist sheet and a questionnaire about family factors and conditioning factors, nursing system, and self-deficit observations. Data analysis was performed using SEM (Structural Equation Modeling) using PLS (partial least square) software. Family factors affect Nursing System with a value (T-statistic 2.079), the conditioning factor affects Nursing System with a value (T-statistic 24,827), and Nursing System affects the Self Deficit with a value (T-statistic 4,104). Family factors and Conditioning factors make a major contribution in influencing the nursing system so that the nursing system has a significant impact on the self-care process in schizophrenic patients who experience self-deficit.

**Keywords**---conditioning factor, family, nursing system, schizophrenia, SEM

## Introduction

Mental health disorders are problems that are increasingly crucial in life, especially in the era of globalization as it is today. Schizophrenia is a group of psychotic disorders that affect thought processes, emotions, communication, abnormal behavior, thought disorders, delusions, and hallucinations (Pardede et al., 2020). The World Health Organization (WHO) in 2019 reported schizophrenia as a severe mental disorder that affects approximately 21 million people worldwide. Meanwhile in Indonesia in 2018 it was reported that around 1.8 per thousand population had schizophrenia (Risksdas, 2018) (Ministry of Health RI (Kemenkes RI, 2018). A preliminary study on two mental health care social institutions in Bangkalan obtained information that families rarely visit schizophrenic patients. In addition, the lack of knowledge and adaptive actions of families in care, the burden of care, and a large number of negative social stigmas have an impact on decreasing the quality of family support in the care of schizophrenic patients at home. This is exacerbated by the COVID-19 pandemic (Rizki et al., 2018; Suhron & Zainiyah, 2021; Chan, 2011). causes the burden of care to increase and greatly affects the quality of care for families with schizophrenia so that stress can occur, stress is the body's reaction to situations that seem dangerous or difficult, stress causes the body to produce adrenaline hormones that function to defend itself (Suhron et al., 2019), and affects Sex Hormone Binding Globulin (Zainiyah & Suhron, 2020), and affects Interleukin 10 (Marasabessy et al., 2020). Schizophrenia is a chronic mental disorder with recurrent relapses. This can result in a decrease in personal skills that

occurs due to individual factors such as non-adherence to taking medication and factors from doctors, nurses, and families (Puspitasari et al., 2020). Schizophrenia is a serious psychiatric problem in addition to having an individual impact, also has an impact on family unrest (Fonseca et al., 2020), especially when treatment is carried out at home. In addition, the social impact is the emergence of stigma where mental disorders are considered as karma, curses, and several other negative perceptions (Suhron et al., 2020). Problems in schizophrenic patients are very complex, one of which can affect physiological conditions such as blood pressure (Amir et al., 2018), and requires collaboration between health workers and family members. The involvement of family members in the treatment of people with schizophrenia is very crucial. According to several studies, it is explained that families must provide extra support and attention to patients with schizophrenia, especially during home care (Fonseca et al., 2020). Good collaboration between nurses and families will help improve mental health, become independent, and provide a pleasant atmosphere for patients (Patricia et al., 2019). This study aims to develop a family care model in caring for schizophrenic patients who experience self-deficit based on a nursing system during the COVID-19 pandemic.

## Method

The explanatory research design with a cross-sectional research approach aims to develop a family empowerment model in treating schizophrenia in terms of self-deficit during the COVID-19 pandemic. This study used a cross-sectional approach to determine the effect of family factors and conditioning factors on the nursing system and also a self deficit in Schizophrenic patients who experienced Self Deficit during the COVID-19 pandemic in Bangkalan Regency in 2021. The population in this study were all families of schizophrenia patients in the Bangkalan Regency Indonesia. two mental health homes in Bangkalan with a sample size of 72 significant others. The sampling technique was using simple random sampling. The research instrument used was a checklist sheet for re-control and a questionnaire about family factors and conditioning factors, nursing system, and self-deficit observations. Informed consent was given to respondents (Suhron & Amir, 2018; Sulaihah et al., 2020; Suhron, 2017). Data analysis was performed using SEM (Structural Equation Modeling) using PLS (partial least square) software.

## Result

the research was conducted in Bangkalan Regency, Madura Island. Madura is located northeast of East Java. The area of the entire island of Madura is  $\pm 5,168$  km<sup>2</sup> with an estimate of  $\pm 10\%$  of the land area of East Java. Bangkalan Regency with an area of 1,260.14 km<sup>2</sup> which is in the westernmost part of Madura Island. The data presented in this study explains the construct of research data according to measurable indicators on each research factor construct including family factors (X1), conditioning factor (X2), nursing system factor (Y1), Self deficit (Y2),

Table 1  
Family characteristic distribution table schizophrenic patients

Characteristics	Frequency	%
Age		
Early Adulthood	1	1,4
Late Adult	13	18.1
Early Elderly	30	41.7
Late Elderly	16	22.2
Elderly	12	16.7
Total	72	100
Employment history		
Civil servant	1	1.4
Self-employed	17	23.6
Private	4	5.6
Farmers	38	52.8
Fishermen	12	16.7
Total	72	100
Income/Month		
1.6 Million	38	52.8

1.7-2.5 Million	22	30.6
>2.5 Million	12	16.7
Total	72	100
Last education		
No school	4	5.6
Did not finish Elementary school	7	9.7
Elementary school/equivalent	31	43.1
Junior high school/equivalent	18	25
High school/equivalent	9	12.5
College	3	4.2
Total	72	100

Source: primary data 2021

Based on table 1, it can be seen that almost half of the age group is the Early Elderly age group, which is 41.7% larger than the other age groups. Most of the total fathers of schizophrenia work as farmers by 52.8%. Based on education, most of the fathers of schizophrenia have elementary school education of 43.1%. Most of the schizophrenic fathers earn 1.6 million/month. Analysis of the indicators of the family empowerment model in caring for Schizophrenia patients during the COVID-19 pandemic (Suhron et al., 2017; Kee et al., 2004; Asman et al., 2021). Analysis of indicators on the Family Care Model in treating Schizophrenic Patients who experience Self Deficit based on the Nursing System during the COVID-19 pandemic which consists of family factors (X1), conditioning factor (X2), nursing system factor (Y1), Self deficit (Y2),

Table 2  
Research variables

Variables	Indicator	Mean±SD
Family Factors		
1	Believe	2,20±0.72
2	Stigma	1.78±0.79
3	Attitudes	1.91±0.84
4	Coping Strategies	2.20±0.75
5	Stress	2.08±0.52
6	Family Function	2.27±0.56
7	Family Structure	2.15±0.45
8	Spiritual	2.09±0.43
Conditioning Factor		
1	Age	46.81±0.81
2	Gender	2.07±0.75
3	Developmental Status	1.67±0.69
4	Sociocultural	1.90±0.74
5	Service System	2.06±0.75
6	Family system	1.70±0.70
7	Pattern live	2.10±0.66
8	Support system	2.05±0.76
	Availability of resources	4.06±0.75
Factor Nursing System		
1	Wholly Compensatory Nursing System) Comprehension	1.70±0.70
2	Partially Compensatory Nursing System	1.93±0.72
3	Supportive - Educative Nursing	2.12±0.77
Self DeficitSelf-		
1	care deficit: personal hygiene	1.98 ±0.76
2	Self-care deficit : dressing/dressing	1.69±0.76
3	Self-care deficit: eating and drinking	1.87±0.74

Source: primary data 2021

Table 2 Shows indicators that have the greatest contribution in reflecting the situation on family factors are the availability of family support sources, family functions such as meeting basic needs both bathing, eating, and resting (Jones et al., 2014; Mustika & Harini, 2017). In addition, the family functions as a partner in the treatment process. Families tend to make projections related to treatment given to schizophrenia so that treatment can be oriented towards meeting the needs of schizophrenia by often talking when not active (Yusuf et al., 2019). Family involvement in treating schizophrenia is more based on the voluntary or commitment of the family itself to treat schizophrenia, this is a reference that family care can be carried out if the schizophrenic family has a strong commitment to treating schizophrenia. empowering schizophrenia such as providing activities and interacting regularly and on a scheduled basis such as actively participating in maintaining house cleanliness and meeting basic needs in the family because the family gets a double burden (Lippi, 2016), and is at risk of experiencing low self-esteem when caring for schizophrenic patients (Suhron, 2016). Analysis of the test results of the Family Care Model in treating Schizophrenic Patients who experience Self Deficit based on the Nursing System during the COVID-19 pandemic. Unidimensionality

Analysis of the constructs of the Family Care Model in treating Schizophrenic Patients who experience Self Deficit based on the Nursing System during the COVID-19 pandemic, which was developed in the research it is constructed as follows.

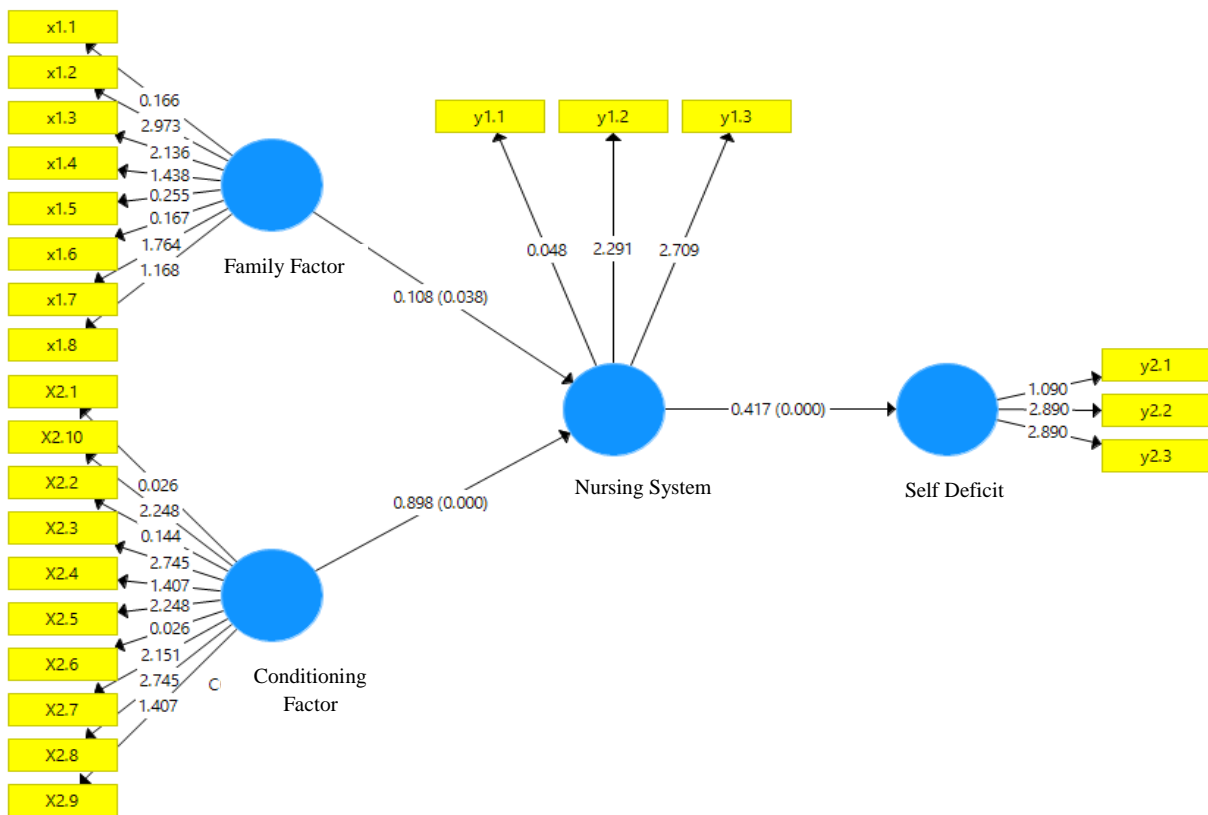


Figure 1. Test the significance of the structural model (inner model) based on (P-value)

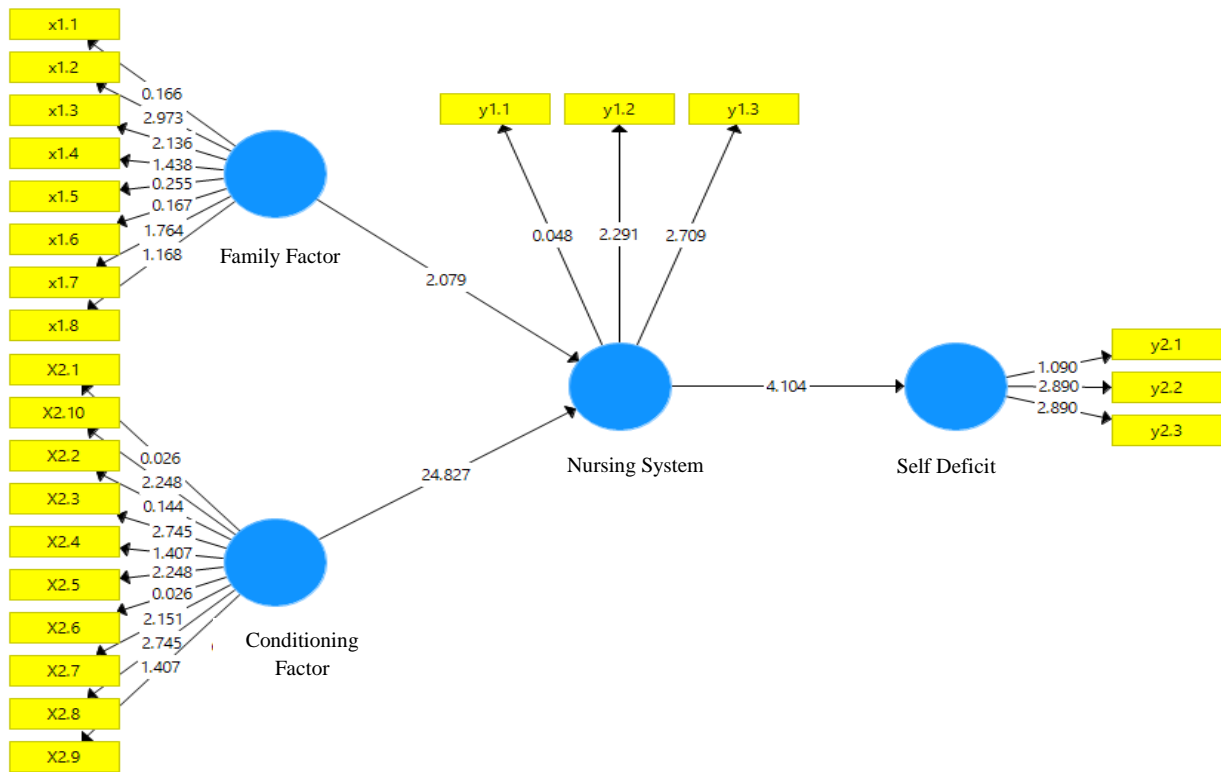


Figure 2. Test the significance of the structural model (inner model) based on T-Statistics

Table 3  
Test the significance of the structural model (inner model)

No	Causality relationship		coefficient	T-statistical	Effect
1	(X1) Family factor (Y1) Nursing System	➡	0.108	2,079	Significant
2	(X2) Conditioning factor (Y1) Nursing System	➡	0,898	24,827	Significant
3	(Y1) Nursing System (Y2) Self Deficit	➡	0,417	4,104	Significant

Development of family empowerment model in treating schizophrenia Self Deficit during the COVID-19 pandemic. The family empowerment model in treating schizophrenia is determined by family factors, patients, and health services. This model is applied by exploring family factors (X1), conditioning factor (X2), nursing system factor (Y1), Self deficit (Y2), based on awareness of the situation facing the family after schizophrenia. The results of this study indicate that there is a relationship between family factors and the nursing system, the conditioning factor with the nursing system, and the nursing system with self-deficit (Brissos et al., 2011; Fernandez-Egea et al., 2008).

**Discussion**

Treatment of schizophrenic patients involves various factors including the individual, the role of the family, the social environment, and health workers. The individual factor is strong in restoring the condition towards being mentally healthy. In addition, an equally important factor is family support. Several studies explain that family support has a positive impact on low relapse when patients are treated at home (Caqueo-Urizar et al., 2015). According to Friedman, family support such as showing attention, appreciation, preparing and monitoring medication administration, giving advice on how to take medication, giving praise is the support needed by

schizophrenic patients (Karmila et al., 2017). There is a significant relationship between education, family roles, and knowledge with medication adherence in schizophrenic patients (Rindayati et al., 2021).

Family factors are considered very important in supporting the nursing process both when the patient is in the hospital or when he returns home (Sari, 2011). When the patient is in the family hospital as a support system that can collaborate with nurses in meeting basic human needs. when the patient returns home, the family becomes an important factor related to all efforts in the healing process, one of which is in administering drugs at home (Zhang, 2016). Family support for drug adherence as a collaborative task of nurses will improve the patient's health process (Febriana et al., 2020). An effective family role in medication adherence will support the healing process of patients with schizophrenia and vice versa (Pealeu et al., 2018). The role of the family is very strategic for people with schizophrenia, especially after the patient returns home. This is also following government programs where the family is the focus of implementing an approach with a nursing function through the Healthy Indonesia Family Approach Program (PIS-PK) (Kemenkes RI, 2017). PIS-PK works through an approach function with functions including caring for each other, respecting each other, and supporting the continuity and development of family life. The role of the family supports towards the nursing system in caring for sick family members, as well as caring family functions, mutual respect will bring good medication adherence, and influence the prevention of relapse (Durmaz & Okanlı, 2014; Noiseux & Ricard, 2008).

Family factors are also important to deal with the stigma that arises in the environment that affects the care of patients with schizophrenia. Stigma can be an obstacle in social interaction because it puts negative attributes and features on someone (Fitryasari et al., 2018). Interventions planned by the family are considered successful in reducing the burden even though psychoeducation is not fully integrated into the service process (Caqueo-Urizar et al., 2015). So to improve the integration, a good bonding system is needed between the nursing care provider and family members. This bonding will allow the formation of a social support network in mental health services that will reduce the physical and mental burden on families and patients (Caqueo-Urizar et al., 2015). Family factors and conditioning factors that are proven to be able to support mental health such as psychoeducation, stress adaptation, emotional stability training, recognition, and structured problem-solving. All of these activities will be very effective if carried out jointly between the patient's family and the nurse as a care provider for people with schizophrenia. This will support the establishment of effective and efficient collaboration between families and the care team to help patients make progress towards recovery (Mueser et al., 2013).

In a nursing system such as In wholly compensatory system, Partially Compensatory Nursing System, Supportive - Educative Nursing the patient is either ambulate, manipulated, or make a reasonable judgment. In the partially compensatory system, both the patient and the nurse perform care measures, while in the supportive educative system, the patient can perform and should learn to perform required measurements of therapeutic self-care, but can't do so without assistants (Jagannathan et al., 2014; Bademli & Duman, 2016). This model emphasizes the role of a nurse only when the patient is unable to attend to their needs especially inactivity of self-care and support patient as the recipient of care. Partially compensatory and supportive educative system of care, the patient's role or actions supported by the nurse partially compensating the care for improving the level of independence. Nursing care interventions were to establish contact with reality, maintain an optimal level of functioning, identify strengths and assets, encourage social interaction, help to communicate effectively with others, establish an adequate balance of rest, sleep and activity, participate in self-care activities, maintain adequate routines for physical well being, cope effectively with illness, be free of physical injuries, not harming others and acceptably express feeling (Laveena, 2010).

## **Conclusion**

Family factors and Conditioning factors have a major influence in the nursing system that affects the self-care process (Self Care) in schizophrenic patients who experience Self Deficit during the COVID-19 pandemic in Bangkalan Regency

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## References

- Amir, F., Mastutik, G., Hasinuddin, M., & Putra, S. T. (2018). Dhikr (recitation) and relaxation improve stress perception and reduce blood cortisol level in type 2 diabetes mellitus patients with OAD. *Folia Medica Indonesiana*, 54(4), 249-255.
- Asman, A., Asman, A., & Dewi, A. K. (2021). Community nursing strategies for tourism health families during COVID-19 pandemic. *International Journal of Health Sciences*, 5(3), 224-231. <https://doi.org/10.53730/ijhs.v5n3.1449>
- Bademli, K., & Duman, Z. Ç. (2016). Emotions, ideas and experiences of caregivers of patients with schizophrenia about " family to family support program". *Archives of Psychiatric Nursing*, 30(3), 329-333. <https://doi.org/10.1016/j.apnu.2015.12.002>
- Brissos, S., Dias, V. V., Balanzá-Martinez, V., Carita, A. I., & Figueira, M. L. (2011). Symptomatic remission in schizophrenia patients: relationship with social functioning, quality of life, and neurocognitive performance. *Schizophrenia research*, 129(2-3), 133-136. <https://doi.org/10.1016/j.schres.2011.04.001>
- Caqueo-Urizar, A., Rus-Calafell, M., Urzúa, A., Escudero, J., & Gutiérrez-Maldonado, J. (2015). The role of family therapy in the management of schizophrenia: challenges and solutions. *Neuropsychiatric disease and treatment*, 11, 145.
- Chan, S. W. C. (2011). Global perspective of burden of family caregivers for persons with schizophrenia. *Archives of psychiatric nursing*, 25(5), 339-349. <https://doi.org/10.1016/j.apnu.2011.03.008>
- Durmaz, H., & Okanlı, A. (2014). Investigation of the effect of self-efficacy levels of caregiver family members of the individuals with schizophrenia on burden of care. *Archives of psychiatric nursing*, 28(4), 290-294. <https://doi.org/10.1016/j.apnu.2014.04.004>
- Febriana, B., Susanto, W., Rochmawati, D. H., & Setiawati, W. E. (2020). Family support is the key to compliance with the treatment of relapsing schizophrenia patients. *J Ners*, 15(2), 457-61.
- Fernandez-Egea, E., Bernardo, M., Parellada, E., Justicia, A., Garcia-Rizo, C., Esmatjes, E., ... & Kirkpatrick, B. (2008). Glucose abnormalities in the siblings of people with schizophrenia. *Schizophrenia research*, 103(1-3), 110-113. <https://doi.org/10.1016/j.schres.2008.04.017>
- Fitryasari, R., Yusuf, A., Tristiana, R. D., & Nihayati, H. E. (2018). Family members' perspective of family Resilience's risk factors in taking care of schizophrenia patients. *International Journal of Nursing Sciences*, 5(3), 255-261. <https://doi.org/10.1016/j.ijnss.2018.06.002>
- Fonseca, L., Diniz, E., Mendonca, G., Malinowski, F., Mari, J., & Gadelha, A. (2020). Schizophrenia and COVID-19: risks and recommendations. *Brazilian Journal of Psychiatry*, 42, 236-238.
- Jagannathan, A., Thirhalli, J., Hamza, A., Nagendra, H. R., & Gangadhar, B. N. (2014). Predictors of family caregiver burden in schizophrenia: Study from an in-patient tertiary care hospital in India. *Asian journal of psychiatry*, 8, 94-98. <https://doi.org/10.1016/j.ajp.2013.12.018>
- Jones, I., Chandra, P. S., Dazzan, P., & Howard, L. M. (2014). Bipolar disorder, affective psychosis, and schizophrenia in pregnancy and the post-partum period. *The Lancet*, 384(9956), 1789-1799. [https://doi.org/10.1016/S0140-6736\(14\)61278-2](https://doi.org/10.1016/S0140-6736(14)61278-2)
- Karmila, K., Lestari, D. R., & Herawati, H. (2017). Dukungan keluarga dengan kepatuhan minum obat pada pasien gangguan jiwa di wilayah kerja puskesmas banjarbaru. *Dunia Keperawatan: Jurnal Keperawatan dan Kesehatan*, 4(2), 88-92.
- Kee, K. S., Horan, W. P., Mintz, J., & Green, M. F. (2004). Do the siblings of schizophrenia patients demonstrate affect perception deficits?. *Schizophrenia research*, 67(1), 87-94. [https://doi.org/10.1016/S0920-9964\(03\)00217-2](https://doi.org/10.1016/S0920-9964(03)00217-2)
- Laveena, D. M. (2010). *Effectiveness of Nursing Care on Patients with Schizophrenia* (Doctoral dissertation, Adhiparasakthi College of Nursing, Melmaruvathur).
- Lippi, G. (2016). Schizophrenia in a member of the family: Burden, expressed emotion and addressing the needs of the whole family. *South African Journal of Psychiatry*, 22(1), 1-7.
- Marasabessy, N. B., Suhron, M., & No, J. R. M. (2020). Stress Family Experience And Profiles Of Tumor Necrosis Factor Alpha And Interleukin-10 Of Nuaulu Tribe Community With Hunting Activity In Mesoendemic Area Of Malaria. *Systematic Reviews in Pharmacy. SRP*, 11(11), 1886-1891.
- Mueser, K. T., Deavers, F., Penn, D. L., & Cassisi, J. E. (2013). Psychosocial treatments for schizophrenia. *Annual review of clinical psychology*, 9, 465-497.
- Mustika, I. W., & Harini, G. A. (2017). Increasing education of family support for decreasing depression level towards elderly. *International Journal of Health Sciences*, 1(3), 10-16. <https://doi.org/10.21744/ijhs.v1i3.46>

- Noiseux, S., & Ricard, N. (2008). Recovery as perceived by people with schizophrenia, family members and health professionals: A grounded theory. *International Journal of Nursing Studies*, 45(8), 1148-1162. <https://doi.org/10.1016/j.ijnurstu.2007.07.008>
- Pardede, J. A., Silitonga, E., & Laia, G. E. H. (2020). The Effects of Cognitive Therapy on Changes in Symptoms of Hallucinations in Schizophrenic Patients. *Indian Journal of Public Health*, 11(10), 257.
- Patricia, H., Rahayuningrum, D. C., & Nofia, V. R. (2019). Hubungan beban keluarga dengan kemampuan caregiver dalam merawat klien skizofrenia. *Jurnal Kesehatan Medika Saintika*, 10(2), 45-52.
- Pelealu, A., Bidjuni, H., & Wowiling, F. (2018). Hubungan Dukungan Keluarga dengan Kepatuhan Minum Obat Pasien Skizofrenia di Rumah Sakit Jiwa Prof. Dr. VL Ratumbusang Provinsi Sulawesi Utara. *Jurnal Keperawatan*, 6(1).
- Puspitasari, I. M., Sinuraya, R. K., Rahayu, C., Witriani, W., Zannah, U., Hafifah, A., ... & Vildayanti, H. (2020). Medication profile and treatment cost estimation among outpatients with schizophrenia, bipolar disorder, depression, and anxiety disorders in Indonesia. *Neuropsychiatric disease and treatment*, 16, 815.
- Rindayati, R., Nasir, A., & Rizal, C. (2021). The Relationship Of Family Roles To Medication Adherence In Schizophrenia Patients. *Journal of Vocational Nursing*, 2(2), 113-118.
- Rizki, F., Nursalam, N., Rahmat, H., & Chan, C. M. (2018). Predictors of family stress in taking care of patients with schizophrenia. *Jounar Ners*, 13(1), 72-79.
- Sari, H. (2011). Dukungan keluarga dalam mencegah kekambuhan pasien skizofrenia di Poliklinik Rawat Jalan RSJ Aceh. *Idea Nursing Journal*, 2(3).
- Suhron, M. (2016). Self-concept nursing care: Self esteem (Asuhan keperawatan konsep diri: Self-esteem).
- Suhron, M. (2017). Care of Mental Nursing The Concept of Self-Esteem. *Jakarta: Mitra Wacana Media*.
- Suhron, M., & Amir, F. (2018). Reduce Violent Behavior Schizophrenia: A New Approach Using LT (Laughing Therapy) and DRT (Deep Relaxation Therapy). *Indian Journal of Public Health Research & Development*, 9(8).
- Suhron, M., & Zainiyah, Z. (2021). How Were Stress Family and INSR (Insulin Receptor) Expression in Polycystic Ovary Syndrome (PCOS) Insulin Resistant in Madurese Tribe?: Indonesia. *Systematic Reviews in Pharmacy*, 12(1), 170-175.
- Suhron, M., Sulaihah, S., & Yusuf, A. H. (2017). Model of Potential Strengthening and Family Roles in Improving Family Members for ODGJ Adaptability. In *Proceeding of The 2nd International Symposium of Public Health* (pp. 344-351). Faculty of Public Health Universitas Airlangga.
- Suhron, M., Yusuf, A., & Subarniati, R. (2019). Assessment of Stress Reactions and Identification of Family Experiences in Primary Care Post Restrain Schizophrenia in East Java Indonesia. Mix Method: Sequential Explanatory. *Indian Journal of Public Health Research & Development*, 10(12).
- Suhron, M., Yusuf, A., Subarniati, R., Amir, F., & Zainiyah, Z. (2020). How does forgiveness therapy versus emotion-focused therapy reduce violent behavior schizophrenia post restrain at East Java, Indonesia. *International Journal of Public Health*, 9(4), 314-319.
- Suhron, M., Yusuf, A., Subarniati, R., Amir, F., & Zainiyah, Z. (2020). How does forgiveness therapy versus emotion-focused therapy reduce violent behavior schizophrenia post restrain at East Java, Indonesia. *International Journal of Public Health*, 9(4), 314-319.
- Sulaihah, S., Hanik, E. N., Suhron, M., Hari, B. N., Mundakir, M., & Esti, Y. (2020). The Role Of Families Caring For People With Mental Disorders Through Family Resilience At East Java, Indonesia: Structural Equation Modeling Analysis. *Systematic Reviews in Pharmacy*, 11(9), 52-59.
- Yusuf, A., Suhron, M., & Subarniati, R. (2019). Assessment of the Kempe Family Stress Inventory in self-care post-restrain schizophrenia. *International Journal of Public Health Science (IJPHS)*, 8(2), 55-59.
- Zainiyah, Z., & Suhron, M. (2020). Psychological Detection Of Stress And Shbg (Sex Hormone Binding Globulin) In Insulin Resistant Of Polycystic Ovarium Syndrome (Pcos) In Women. *Indonesia. SRP*, 11(11), 1875-1880.
- Zhang, C. (2016). The involvement of family members in the treatment of patients with schizophrenia. *Current Treatment Options in Psychiatry*, 3(2), 111-118.