

## Improving Health Services Affecting Coping Mechanism of the Family of Skizofrenia Patients

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### Abstract

**Aim:** This study aims to determine the effect of health services on coping mechanisms of families with schizophrenia. **Method:** The sample consisted of 260 family carers of individuals with schizophrenia in Ponorogo, East Java, Indonesia. Caregivers of families completed filling in the service factor questionnaire and coping mechanism questionnaire. **Results:** Community Value for Service Factor 0.662 and Family Coping 0.670 which means valid and strong. Community Value for Service Factor 0.853 and Family Coping 0.800 means Reliability. T-Statistics value of 0.205, which means there is an influence between service factors on family coping. **Conclusion:** Research on improving health services for coping mechanisms in family members of individuals with schizophrenia will help design interventions to improve coping mechanisms.

**Keywords:** Health services; Coping mechanism; Family; Schizophrenia; Indonesia.



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### 1. Introduction

People with disabilities including schizophrenics reported higher rates level of needs [1]. Service factors are operational forms of environmental concepts consisting of indicators of accessibility, adequacy, and nursing. While coping mechanisms are the ability of families with schizophrenia to regulate stressors consisting of coping focus problems and emotional focus coping [2]. Accessibility is an opportunity or convenience for consumers or communities to use health services that are appropriate and comparable to their needs [3]. People with disabilities in developing countries such as India or Indonesia face obstacles, ignorance about the availability of services, service and transportation costs, which is far greater for accessing health services compared to people without disabilities [4]. Coping mechanism is influenced by individual ability (personal ability), social support (Social support), metari assets (material assets), and trust (positive belief). The quality of social support can be measured by professional social support (perceived professional social support) [5]. The service factor is a professional social support. The results of a study of 100 respondents indicate that low stress is associated with strong social support and low use of coping focus emotions [6].

The stress and coping model is based on reciprocal interaction between people and the environment [7]. However, the influence of service factors as an operational form of environmental concepts on coping mechanisms is rarely studied. The purpose of this study was to explain the influence of service factors on coping mechanisms of families with schizophrenia. Future research is expected to be an indication that the better the accreditation of health care centers will be able to improve family coping. Families will be more obedient to bring sufferers to health services.

### 2. Method

We conducted this research in Ponorogo Regency, East Java, Indonesia with a sample of 160 with cross-sectional designs. Data is collected using questionnaires that have been tested for validity and reliability. respondents were taken by random sampling technique in five health centres in the north and west Ponorogo health service area. Participants were 81 men (50.6%) and 79 women (49.4%). Their average age is 49 (SD = 14.2). Furthermore, 139 married respondents (86.6%) and 10 single (6.3%). Regarding their level of education, 102 have completed basic education (24.4%), 39 have achieved secondary education (48.68%), and 3 have completed tertiary education (1.9%). Health service variables were measured based on indicators of accessibility, nurse professionalism, and adequacy. A higher score reflects better health services. The Cronbach's alpha coefficient for the scale was 0.736. Family coping variables are compiled based on the FACE questionnaire. A higher score reflects better family coping. The Cronbach's alpha coefficient for the scale was 0.534.

Before statistical analysis, data were selected based on three standard deviations above or below the average score. Missing values are excluded from the analysis. Descriptive statistics and correlation analysis were performed with the SPSS program (Version 22.0, IBM Corp, Armonk, NY, USA). Structural equation models are tested with SMART PLS (Version 3.0, Muthen & Muthen, Los Angeles, CA, USA). The study of a structural model with a

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corrected level of confidence (CI) of 95% uses 5000 bootstrap samples. The research has passed the test from the ethics committee of the Faculty of Public Health Airlangga University Surabaya.

### 3. Result

#### 3.1. Communality Value

The results of the communality test can be seen in [table 1](#). below:

**Table-1.** Test results for communality

Construct	Communality Value (Com)	Information
Service Factor	0.662	Valid and strong
Family Coping	0.670	Valid and strong

[Table 1](#). above shows that all latent variable constructs have valid convergent validity in preparing this structural modelling equation. All variables have values greater than 0.5.

#### 3.2. Composite Reliability

Measurement of composite reliability is used to measure whether an indicator can be truly trusted to measure a construct. Reliability of composite construction is used as a measure of internal consistency.

In order to measure whether an indicator can truly be trusted to measure a construct, a variant-based structural equation can be performed with a measure of composite reliability ( $\rho_c$ ) or construct reliability. The reliability of composite constructs is used as a measure of internal consistency. The composite reliability testing results are explained in [table 2](#).

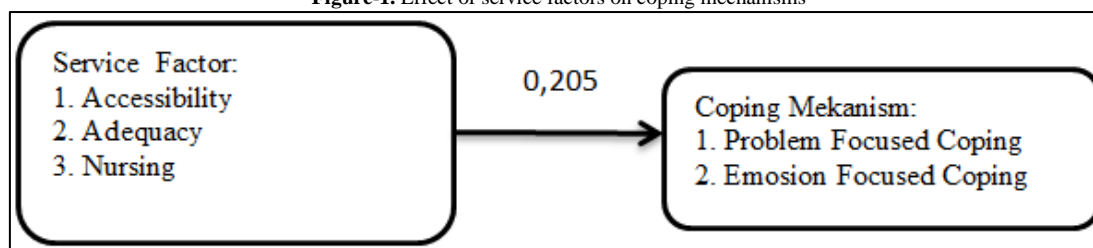
**Table-2.** Measurement of composite reliability

Construct	Communality Value (Com)	Information
Service Factor	0.853	Reliable
Family Coping	0.800	Reliable

[Table 2](#). States that the composite reliability test results for exogenous latent variables produce a value ( $\rho_c$ ) of more than 0.7. This means that the indicators used in construct measurements are fully trustworthy and are able to measure the construct strongly.

#### 3.3. The Influence between Research Variables

**Figure-1.** Effect of service factors on coping mechanisms



Based on statistical tests that, the influence of service factors on coping mechanisms shows the value of  $p = 5.1$ , meaning there is an influence of service factors with coping mechanisms of families of schizophrenic patients.

### 4. Discussion

The quality of health services influences the coping mechanism of families with schizophrenia. This is based on the value of the T-test, indicating that the value of the T statistic is 5.10 ( $T_{hitung} > T_{Critical} (1.96)$ ). So that H1 is proven, health services influence the coping mechanism of families with schizophrenia.

Service is an effort to help prepare or take care of what others need [8]. According to [European Patient's Forum](#) [9] service is the ability and resources possessed by the organization to realize quality health services. Services are measured based on indicators of accessibility, health workers (nurses), adequacy [9]. Health services consist of three indicators, namely: 1) Accessibility; 2) Adequacy; 3) health workers (nurses). *Accessibility is an individual's ability to reach organizational services* [9]. *Adequacy is the ability of service users to be fulfilled by organizational services* [9]. Health workers (nurses) are people who receive special education to care for, especially caring for diseased<sup>6</sup>. Nurses are health workers with promotive, preventive and rehabilitative competencies.

The Accessibility instrument developed by researchers included delaying treatment for the past two months, patients were taken to other cities to get the treatment done in other cities, and having difficulty achieving the closest mental health services. People with disabilities in South Asia has a major challenge in accessing health services [10]. in United States access, the quality of care reveals very poor results for people with disabilities who are not insured [1], however, in Indonesia almost all Schizophrenic sufferers already have insurance.

The Adequacy indicator is measured based on five questions, namely; 1) my family gets enough information from the Puskesmas about treatment options for people with mental disorders; 2) my family is involved in the Puskesmas in making care decisions for people with mental disorders; 3) Puskesmas provide information to my family about the side effects of psychiatric medications; 4) Puskesmas adjust the care of my family members who experience mental disorders according to the needs of people with mental disorders who are constantly changing; 5) Puskesmas receive input from my family about the quality of care provided for people with mental disorders.

Health workers (nurses) are measured based on three questions, namely: 1) my family receives care services in accordance with Puskesmas standards/guidelines; 2) my family is satisfied with the security of care given to my family members who have mental disorders; 3) My family is satisfied with the ongoing care of my family members who experience mental disorders from time to time. Patient trust is the most significant predictor of family satisfaction in health services [11].

Koping is a continuous cognitive and behavioural change as an individual effort to overcome external and internal demands that are considered as a burden or exceed the resources they have and endanger their existence or welfare [2]. Koping is an individual's ability to deal with stressful situations or demands that are emotionally burdensome. Family coping is a cognitive change that is used by caregivers to deal with stressful situations.

One of the family coping assessments were measured based on the Caregiver Cope. Caregiver Cope (CgCOPE) instrument assessing family coping based on aspects of problem-focused coping and emotion-focused coping. Assessment of focus coping problems consists of caring and social support. Caring measurements are represented by questions: 1) I will pay more attention and care for the patient carefully; 2) I will pay more attention and care for the patient carefully. Measurement of Social Support is represented by questions: 1) I share problems about the condition of the sufferer with relatives/friends; 2) I get help from people around Emotional focus focusing on coping is represented by omission and religious. Two questions for measuring omission are: 1) I plan to get out of the house for a while when the sufferer goes berserk; 2) I imagine letting sufferers relapse. Whereas religious is represented by questions, I think to multiply pray/worship so that the patient's condition is better. Research on improving health services for coping mechanisms for family members of individuals with schizophrenia will help when designing interventions to improve coping mechanisms. High avoidance causes guilt and reduces self-esteem for caregivers [12]. Stigma and Family Support in Caring for People with Mental Disorders [13].

Research on the effect of service quality on coping mechanisms is still very rare. The analysis of Focus Group Discussion on families of Schizophrenic patients shows that even though patients get the same medication from other health services, the benefits of drugs from health services that they believe provide a better effect. Patient satisfaction is positively associated with higher levels of trust (OR = 14,995), lower levels of hospital medical expenditure (OR = 5.736–1.829), good staff attitudes (OR = 3,155) as well as a good ward environment (OR = 2,361) [11]. There is a factor of a family trust, good staff attitudes and good environment in health services that they are able to provide better results. Nurses can play an effective role (nurses as loving caregivers and nurses as supporters) in improving family coping mechanisms by considering the importance of training that helps families provide care and support them during the treatment process [14]. The number of service users shows the quality of the services provided [15]. Government health services as a provider of mental health services play a fundamental role in the decision to seek treatment and are able to predict coping mechanisms [16].

## 5. Conclusion

Research on improving health services for coping mechanisms for family members of individuals with schizophrenia will help when designing interventions to improve coping mechanisms.

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## Conflicts of Interest

The authors declare no conflict of interest

## References

- [1] Gulley, S. P. and Altman, B. M., 2008. "Disability in two health care systems: Access, quality, satisfaction, and physician contacts among working-age Canadians and Americans with disabilities†." *Disabil Health J.*, vol. 1, pp. 196-208.
- [2] Lazarus and Folkman, S. S., 1984. *Appraisal and coping*. New York: Springer Publishing Company, Inc.
- [3] World Health Organization, 2013. "Mental health action plan 2013-2020. WHO library cataloguing-in-publication dataLibrary cataloguing-in-publication data." pp. 1-44. Available: <https://doi.org/ISBN>
- [4] Gudlavalleti and John, N., 2014. "Access to health care and employment status of people with disabilities in South India, the side (south india disability evidence) study." *BMC Public Health*, vol. 14, pp. 1-8.
- [5] Carver Scheir, W., 1989. "Assessing coping strategies: a theoretically based approach." *Journal of Personality and Social Psychology*, vol. 54, pp. 267-283.

- [6] Callan, V. J., Terry, D. J., and Schweitzer, R., 1994. "Coping resources, coping strategies and adjustment to organizational change: Direct or buffering effects?" *Work and Stress*, vol. 8, pp. 372-383. Available: <https://doi.org/10.1080/02678379408256543>
- [7] Lazarus, 1999. *Stress and emotion: A new stheynsis*. New York: Springer Publishing Company, Inc.
- [8] Ministry of Education and Culture of the Republic of Indonesia, 2016. "KBBI." Available: <https://kbbi.kemdikbud.go.id/>
- [9] European Patient's Forum, 2016. "Annual general meeting 2016." Available: [http://www.eu-patient.eu/globalassets/events/2016/2016-agm/epf\\_agm\\_day\\_1.pdf](http://www.eu-patient.eu/globalassets/events/2016/2016-agm/epf_agm_day_1.pdf)
- [10] Gudlavalleti, 2018. "Challenges in accessing health care for people with disability in the South Asian context: A review." *Int. J. Environ. Res. Public. Health*, vol. 15, pp. 1-11.
- [11] Shan, L., Li, Y., and Ding, D., 2016. "Patient satisfaction with hospital inpatient care: Effects of trust, medical insurance and perceived quality of care." *PLoS One.*, vol. 11, pp. 1-18.
- [12] Grover, S., Kate, N., Chakrabarti, S., and Avasthi, A., 2017. "Positive aspects of caregiving and its correlates among caregivers of bipolar affective disorder." *East Asian Arch Psychiatry.*, vol. 27, pp. 131-141. Available: <http://www.ncbi.nlm.nih.gov/pubmed/29259143>
- [13] Nasriati, R., 2017. "Stigma dan dukungan keluarga dalam merawat orang dengan gangguan jiwa (odgj)." *J. Ilm Ilmu - Ilmu Kesehatan.*, vol. 15, pp. 56-65.
- [14] Imanigoghary, Z. P., Peyrovi, H. P., Nouhi, E. P., and Kazemi, M. P., 2017. "The role of nurses in coping process of family caregivers of vegetative patients: A qualitative study." *Int. J. Community Based Nurs Midwifery*, vol. 5, pp. 70-81.
- [15] Aimola, L., Gordon-Brown, J., Etherington, A., Zalewska, K., Cooper, S., and Crawford, M. J., 2019. "Patient-reported experience and quality of care for people with schizophrenia." *BMC. Psychiatry.*, vol. 19, pp. 4-9.
- [16] Mendoza, K., Ulloa, A., Saavedra, N., Galván, J., and Berenzon, S., 2017. "Predicting women's utilization of primary care mental health services in Mexico City." *J. Prim. Care Community Heal.*, vol. 8, pp. 83-88.