

## **A**RTICLE

# The impact of social capital, demographic factors, and coping strategies on community adaptation in supporting people with severe mental illness

Retno Lestari,<sup>1,2</sup> Ah Yusuf,<sup>3</sup> Rachmat Hargono,<sup>1</sup> Ahsan Ahsan,<sup>2</sup> Febri Endra Budi Setyawan,<sup>4</sup> Nyoman Anita Damayanti<sup>1</sup>

<sup>1</sup>Doctoral Program of Public Health, Faculty of Public Health, Universitas Airlangga; <sup>2</sup>Study Program of Nursing Science, Faculty of Medicine, University of Brawijaya; <sup>3</sup>Faculty of Nursing, Universitas Airlangga, Mulyorejo, Surabaya; <sup>4</sup>Faculty of Medicine, University of Muhammadiyah Malang, Malang, Indonesia

## **Abstract**

Background: People with severe mental illness have the ability to live a satisfactory and independent life with the help of the community. Their adaptation to life's challenges is a dynamic process, and the community plays an important role. This research, therefore, aims to address the question of how social capital, demographic factors, and coping strategies affect the community's ability to adapt to people with severe mental illness.

Design and methods: The multi-stage random sampling was used to obtain data from 137 respondents from rural society using an analytic observational design and cross-sectional approach. In addition, the Somers' D test was used to measure the effect of social capital, demographic factors, and coping strategies on community adaptation.

Results: The results showed a significant effect of social capital, demographic factors, and the coping strategy of community adaptation (P<0.05). Based on empirical research, access to social capital is critical in fostering community adaptation through its social participation, network, trust, coping strategies, and cooperation.

Conclusions: In conclusion, social capital, demographic factors, and coping strategies are significant factors in developing community adaptation of people with severe mental illness.

## Introduction

Severe mental illness is often defined as a disorder that affects a person's way of thinking, feeling, and behaviour. Its symptoms include distortions of perception, delusions, hallucinations, and various types of disorders. People with severe mental illness (PSMI) have difficulties in carrying out daily tasks, therefore they tend to avoid social interaction. A supportive community is vital for the mentally ill as it provides a caring and supportive system capable of improving their quality of life. The goal of every community is to ensure PSMI live an independent life by assisting

them in dealing with the consequences of mental illness. A greater number of PSMI are characterized by low-levels of psychotic symptoms and less likely to be diagnosed with other serious physical conditions. Therefore, it is essential to address any co-occurring conditions in their recovery process.<sup>1</sup>

According to previous studies, a strong sense of community provides opportunities for PSMI to learn new skills, thereby encouraging independent life style. Community participation typically affects mental health, social functioning, and overall well-being. However, a strong sense of belonging and social commitment helps to build security, trust, feeling valued, and acceptance. People create new relationships through hobbies or social groups, managing the mental illness.<sup>2,3</sup> In addition, when the community provides assistance to PSMI, their mental state of health improves, and this helps to reduce the amount of hospital readmission cases.<sup>4,5</sup>

Most communities adapt and respond to changing circumstances and environments by creating positive impacts on individuals' with mental health through the development of resilience, improving their capacities, and reducing their vulnerability. However, this adaptation process needs to be established with local policies, plans, and programs for proper mental health development. The following indicators are related to the success of community adaptations: (1) establishment of acceptable mental health programs for supporting PSMI, (2) development of health care centers, and, (3) creation of supportive employment programs and ongoing education policies.<sup>6,7</sup>

Some of the factors related to community adaptation processes are social capital, demographic factors, and coping strategies. Social capital refers to the connecting factors among individuals, such as norms, network, trust, and livelihoods. It is also defined as the relationship between community resources and mental health.<sup>8-10</sup> Most studies show that social capital has the ability to improves both physical and mental health through interaction, active relationship between members by motivating each other when dealing with daily stress. Approximately 60% of their wellbeing was positively affected by social and human capital.<sup>11-13</sup>

#### Significance for public health

People with severe mental illness (PSMI) have difficulties in carrying out daily tasks, therefore, they tend to avoid social interaction. A strong sense of community provides opportunities for PSMI to learn new skills, thereby encouraging an independent life style. The ability of communities to understand the stress experienced by PSMI, enables them to tackle the constraints. This study answers the question associated with the social capital, demographic factors, and coping strategies of communities in coping with mental ill people.





According to research, demographic factors also have a significant impact on the social, economic status, and coping strategies of the adaptation process. However, a cross-sector partnership is needed to ensure greater collaboration between the public and private health sectors in order to increase social resources. Previous studies showed that migration and social changes had negative effects on the mental health issues of parents with an adverse impact on other family members.<sup>14,15</sup>

Over the years, little attention has been paid to community adaptation in supporting the recovery of a patient with mental illness. The ability of communities to understand the stress associated with PSMI enables them to tackle the constraints. This research, therefore, aims to answer the question associated with the social capital, demographic factors, and coping strategies of communities in coping with mental ill people.

## Design and methods

Data were obtained from a total of 137 society members randomly selected from a rural community in Malang, East Java, Indonesia, by using observational and cross-sectional approaches. Furthermore, confounding variables were controlled by applying inclusion criteria on adults ≥20 years that interacted with PSMI at least 1 hour/week and living in the area for the last 6 months. The exclusion criteria consist of respondents unable to participate in the study and those that refused to give their consent.

The first stage of the selection process utilized the cluster sampling process to select each member from the five rural communities. Respondents were provided with adequate information on the study objectives, procedures, with their right to participate or withdraw from the study at any time. In addition, questionnaires were tested for validity and reliability before being distributed to the respondents. Finally, the Somers' D test was used to measure the effect of social capital, demographic factors, and coping strategies on community adaptation.

#### Results and discussion

The results of the study were used to identify factors related to community adaptation, namely social capital, demographics, and coping strategies. Tables 1 and 2 show the means/standard deviation of each variable and the cross-tabulation analysis of the three factors related to community adaptation. Somers' D test result was used to analyze the association between variables, as shown in Table 3.

Based on Table 1, social capital and coping strategies had the highest mean score of 33.01 (SD=15.47) and 32.81 (SD=15.25), respectively. The social capital of the community contains net-

Table 1. Means and standard deviation of variables, N=137.

Variables	Min	Max	Mean	SD
Social capital	4.00	48.00	33.01	15.47
Demographic factors	2.00	75.00	28.81	28.89
Coping strategies	4.00	48.00	32.81	15.25
Community adaptation	1.00	45.00	12.35	15.58

Table 2. Social capital, demographic factors, coping strategies on community adaptation cross tabulation.

Variables		Community adaptation			
			Poor	Average	Good
Social capital	Poor	23	11	0	34
		100.0%	52.4%	0.0%	24.8%
	Average	0	1	2	3
		0.0%	4.8%	2.2%	2.2%
	Good	0	9	91	100
		0.0%	42.9%	97.8%	73.0%
Demographic factors	Poor	12	0	0	12
		52.2%	0.0%	0.0%	8.8%
	Average	11	21	3	35
		47.8%	100.0%	3.2%	25.5%
	Good	0	0	90	90
		0.0%	0.0%	96.8%	65.7%
Coping strategies	Poor	10	9	21	40
		43.5%	42.9%	22.6%	29.2%
	Average	1	0	3	4
	Ü	4.3%	0.0%	3.2%	2.9%
	Good	12	12	69	93
		52.2%	57.1%	74.2%	67.9%

Table 3. Somers' D results.

Variables	Significance level	Correlation coefficient	Interpretation
Social capital	0.000	0.757	Strong correlation
Demographic factors	0.000	0.929	Very strong correlation
Coping strategies	0.022	0.187	Very weak correlation



works, residents' participation in community events, trust and safety, religious activities, adequate training/education, and caring neighbours. It also provides innovative ideas that influence social interactions, cohesion, and community actions for improving health and wellbeing. <sup>16-18</sup> The demographic factors include respondents' education, occupation, and income per month. This study found that 30% of respondents were left behind at home as their partners working abroad. Furthermore, the migrants and their family members left behind were at higher risk of experiencing severe mental illness (aHR: 1.00, 95% CI 0.93–1.08). <sup>14,15</sup>

Community support mediates the stigma associated with mental illness, and this makes PSMI to feel emotionally safe and protected (90% CI = 0.093 to 0.125). Mental health services need to be integrated with local community programs, stakeholders, and local government. 19-21 A wide range of community coping strategies used to help the healing process include self-introspection, expressed feelings, improved spiritual well-being, and volunteers. Community adaptations are related to local resources and mental illness. Therefore, they need to possess the ability to cope with PSMI and determine social changes related to members. 21-23

Table 2 shows the correlation between social capital, demographic factors, coping strategies, and community adaptation. Findings showed that these factors influence the way the community adapts to PSMI lives.

This research showed a significant correlation between social capital, demographic factors and coping strategies on community adaptation (P<0.05). Based on empirical research, access to social capital is critical in fostering community adaptation through participation, network, trust, and cooperation. Community adaptation is a complex process that involves the characteristics of individuals in a population and its environment. A number of factors have been identified as parameters of community adaptation, such as demographic aspects, availability of resources, facilities, political aspects, social norms, cognitive and emotional responses. Demographic factors are significant in the lives of PSMI. Each member of the society has considerable experience in coping with challenging tasks, with age used to reflect knowledge and experience. In addition, these factors are used to create health policy options that allow for the recognition and representation of community members and stakeholders to support PSMI with an opportunity for them to participate in social activities.<sup>24-26</sup>

The role of community adaptation in supporting PSMI is yet to be determined, therefore, a growing number of such individuals has the ability to affect the responses of individuals and societies. Studies showed the strategies used to develop community adaptation by examining competence and resources to improve action towards the problems. Community support tends to improve resilience through social skills development, interaction, and interpersonal relationships between members, thereby preventing psychological trauma. Community support is imperative to maintain mental health and wellbeing. <sup>27,28</sup>

Studies have also shown that living close to a person suffering from mental illness is a challenging situation. People tend to experience fear, a sense of guilt, anxiety, panic, and sadness. According to ongoing medical treatment, there are three strategies used to improve community adaptation to helping PSMI seek health services and providing adequate emotional support. These include general inequity, standards and values, discrimination, and local economic opportunities. Community adaptation helps individuals, families, caregivers, and other residents to support PSMI. However, this adaptation process takes time. Therefore, it needs to align with the local health center program and government to achieve greater success. <sup>29-31</sup>

#### **Conclusions**

In conclusion, social capital, demographic factors, and coping strategies are significant factors in the development of community adaptation of PSMI.

**Correspondence:** Ah Yusuf, Faculty of Nursing, Universitas Airlangga, Mulyorejo, Surabaya, Indonesia. Tel.:+62315913257 - Fax: +62315913257

E-mail: ah-yusuf@fkp.unair.ac.id

**Key words:** social capital; demographic factors; coping strategies; community adaptation; mental illness.

**Contributions:** RL managed and planned this study, AY and RH were involved in planning and supervised the study, AA, FEBS, NAD aided in performed the calculations, interpreting the results and worked on the manuscript.

Conflict of interest: The author declares no potential conflict of interest.

**Funding:** This study was financially supported by Faculty of Nursing, Universitas Airlangga.

**Acknowledgments:** The author thanks to Faculty of Public Health, Universitas Airlangga for their tremendous support and help during this study.

Clinical trials: This research has been approved by research ethics committee of Faculty of Medicine, University of Muhammadiyah Malang.

Conference presentation: Part of this paper was presented at the 4<sup>th</sup> International Symposium of Public Health, 2019 October 29-31, Griffith University, Gold Coast, Australia.

Received for publication: 6 March 2020. Accepted for publication: 13 June 2020.

©Copyright: the Author(s), 2020 Licensee PAGEPress, Italy

Journal of Public Health Research 2020;9:1838

doi:10.4081/jphr.2020.1838

This work is licensed under a Creative Commons Attribution

NonCommercial 4.0 License (CC BY-NC 4.0).

## References

- Barnes AL, Murphy ME, Fowler CA, et al. Health-Related Quality of Life and Overall Life Satisfaction in People with Serious Mental Illness. Schizophrenia Research and Treatment 2012;2012:1–6.
- 2. Bromley E, Gabrielian S, Brekke B, et al. Experiencing community: perspectives of individuals diagnosed as having serious mental illness. Psychiatr Serv 2013;64:672-9.
- Dupéré V, Perkins DD. Community types and mental health: a multilevel study of local environmental stress and coping. Am J Community Psychol 2007;39: 107–119.
- Dupéré V, Perkins DD. Community types and mental health: a multilevel study of local environmental stress and coping. Am J Community Psychol 2007;39:107–119.





- Bromley E, Gabrielian S, Brekke B, et al. Experiencing Community: Perspectives of Individuals Diagnosed as Having Serious Mental Illness. Psychiatr Serv 2013;64:672-9.
- Adger WN. Social Capital, Collective Action, and Adaptation to Climate Change. Econ Geogr 2003;79:387–404.
- 7. Lemos MC, Boyd E, Tompkins EL, et al. Developing adaptation and adapting development. Ecol Soc 2007;12:26.
- 8. Pelling M, High C. Understanding adaptation: What can social capital offer assessments of adaptive capacity? Global Environ Chang 2005;15:308–319.
- 9. Vyncke V, De Clercq B, Stevens V, et al. Does neighbourhood social capital aid in levelling the social gradient in the health and well-being of children and adolescents? A literature review. BMC Public Health 2013;13:65.
- Dykxhoorn J, Hollander A-C, Lewis G, et al. Family networks during migration and risk of non-affective psychosis: A population-based cohort study. Schizophr Res 2019;208:268-275.
- 11. Jordan JC. Swimming alone? The role of social capital in enhancing local resilience to climate stress: a case study from Bangladesh. Clim Dev 2014;7:110-123.
- 12. Dehnavieh R, Amini S. Social Capital and Its Effects on Health: Implications for Policy Makers. Iran J Public Health 2015:44:1566-1567.
- Lestari R, Yusuf R, Hargono R, et al. Exploring Social Capital for Helping People with Severe Mental Disorders: A Preliminary Study. Indian Journal of Public Health Research & Development 2019;10:754-758.
- Dykxhoorn J, Hollander A-C, Lewis G, et al. Family networks during migration and risk of non-affective psychosis: A population-based cohort study. Schizophr Res 2019;208:268-275.
- 15. Dykxhoorn J, Hollander A-C, Lewis G, et al. Risk of schizophrenia, schizoaffective, and bipolar disorders by migrant status, region of origin, and age-at-migration: a national cohort study of 1.8 million people. Psychol Med 2019;49:2354-2363.
- 16. Huda MdN, Hossin MZ, Ashik-E-Elahi S, et al. Socio-Demographic and Economic Correlates of Climate Change Coping and Adaptation Strategies: A Study on the Farmer Communities in Barisal District, Bangladesh. Am J Clim Change 2016;5:167-177.
- 17. McPherson KE, Kerr S, McGee E, et al. The association between social capital and mental health and behavioural problems in children and adolescents: an integrative systematic review. BMC Psychology 2014;2:7.

- Abdulahad R, Brownlee K, Graham JR, et al. Measuring Social Capital: An Adaptation and Translation into Arabic of the Onyx and Bullen Social Capital Scale for Iraqi-Canadians. Aust Soc Work 2018;71:462–477.
- Rodima-Taylor D. Social innovation and climate adaptation: Local collective action in diversifying Tanzania. Appl Geogr 2012;33:128–134.
- Chronister J, Chou C-C, Liao H-Y. The Role of Stigma Coping and Social Support in Mediating The Effect of Societal Stigma on Internalized Stigma, Mental Health Recovery, and Quality of Life Among People with Serious Mental Illness. J Comm Psychol 2013;41:582–600.
- Aflakseir A. The role of social support and coping strategies on mental health of a group of Iranian disabled war veterans. Iran J Psychiatry 2010;5:102-7.
- 22. Cohen S, Asgary R. Community Coping Strategies in Response to Hardship and Human Rights Abuses Among Burmese Refugees and Migrants at the Thai-Burmese Border. Fam Comm Health 2016;39:75–81.
- Quinn CH, Ziervogel G, Taylor A, et al. Coping with Multiple Stresses in Rural South Africa. Ecol Soc 2011;16:1-20.
- Dang HL, Li E, Nuberg I, Bruwer J. Factors influencing the adaptation of farmers in response to climate change: a review. Clim Dev 2019;11:765-774.
- Saptutyningsih E, Diswandi D, Jaung W. Does social capital matter in climate change adaptation? A lesson from agricultural sector in Yogyakarta, Indonesia. Land Use Policy, 2019:104189.
- Hamilton ML, Lubell M. Climate change adaptation, social capital, and the performance of polycentric governance institutions. Clim Change 2019;152:307–326.
- 27. Hayes K, Poland B. Addressing Mental Health in a Changing Climate: Incorporating Mental Health Indicators into Climate Change and Health Vulnerability and Adaptation Assessments. Int J Environ Res Public Health 2018;15:1806.
- Ebi KL, Semenza JC. Community-Based Adaptation to the Health Impacts of Climate Change. Am J Prev Med 2008;35:501–507.
- Rowe JW. Successful Societal Adaptation to the Aging of America. Public Policy & Aging Report 2011;21:11–16.
- Moore THM, Kesten JM, López-López JA, et al. The effects of changes to the built environment on the mental health and well-being of adults: Systematic review. Health Place 2018;53:237-257.
- 31. Tropp LR. Adaptation to diversity: Individual and societal processes. Proc Natl Acad Sci 2019;116:12131-12133.