Impactful Social Media on Family Living with Mentally Disordered Members in Rural Areas

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Abstract

Objective: This study explores the impact of social media on family who live with mentally disordered members in rural areas of Ponorogo, East Java Province. Various efforts have been made to determine whether or not social media can help families in rural areas deal with serious stress because of living with their mentally disordered members. Method: This study involves 160 members with mental disorder and their family. Stress is measured based on Lazarus and Folkman theory. Data are analyzed using the Sperman test with SPSS software. Results: Using Beck criteria, it was found that 60% (N = 160) of families feel stressed. Interestingly, there was a significant difference of stress experienced by the social media users and non-social media users (p value= 0.002). There are 31.3% of social media users who are less stressed while 68.7% non-social media users felt more stressed. Conclusion: This study verifies the stress experienced by families who live with mentally disordered members. It can be concluded that the families who use social media are less stressed even though they live with mentally disordered members. It means social media can prevent stress. In addition, it is recommended that counseling and psychological training should be designed by considering participants’ gender and level of education.

Keywords: Social media; Mental health; Family; Rural area; Stress.

1. Introduction

Approximately 50-90% mentally disordered patients live with their families (Von Kardorff et al., 2016). It was estimated that 43.5 million Americans need caregivers with 19-hour work per week (National Alliance for Caregiving, 2009). About 1% of the population in the UK are people with mental disorder (Smith, 2015). The prevalence of severe mental disorders in Indonesia is 1.7 per 1000 population while the prevalence of that in East Java Province is 2.2 per 1000 population. East Java Province is ranked as the 4th for the highest number of mental disorders in Indonesia. About 50% of severely mentally disordered members in Ponorogo was 2.2 per 1000 population. Ponorogo Regency had a total of 1,321 people with severe mental disorders out of 600,336 people in the productive age. It means the prevalence of severe mental disorders in Ponorogo was 2.2 per 1000 population (Nasriati, 2017). The prevalence of mental disorders in Paringan Sub-District, Ponorogo Regency was 11.2 per 1000 population. Out of 5980 residents, 67 people were found to suffer from mental illness (Mashudi et al., 2016).

Family is a complex functional unit in which each member influences positively and negatively other members (Kerr, 1988). One of the negative influences is stress. Stress is defined as the interaction between individuals as family members and surroundings, assumed as a threat which requires them to find sources to deal with it (Lazarus and Folkman, 1984). Stress is one of the most common symptoms afflicting family who live with mentally disordered members. Masulani-Mwale et al. (2018), studied the prevalence of stress among parents whose children suffer from intellectual disabilities in Malawi.

eHealth is a term defined as delivering health services and information on Internet using technology (McLendon, 2000). Looking for reliable online health information to support decisions on someone’s health gives them a sense of control over the diagnosis and self-empowerment (Grando and Rozenblum, 2015). Jorgo (2010) stated that empowering people by sharing responsibility managing health conditions may increase medical outcomes at lower cost especially for chronic and expensive diseases, such as mental disorders (Knapp and Mngalote, 2004).

Globally, 2.34 billion people use social media. By 2020, it is expected that more than 2.95 billion Internet users will use social networking websites (Statista, 2019). The study done by Eysenbach et al. (2004) studied about online peer support. Fisher et al. (2015), researched about social media can prevent suicide. Griffiths and Caler (2009) conducted a study about an online support group for depression. Meanwhile, Best et al. (2014) researched about online communication, social media and youth welfare. A study about social networking and online care for depression was conducted by Kavanagh et al. (2014). Moritz et al. (2016), discussed the effect of online
interventions for depression in schizophrenia, and Leung Ricky (2015) studied social media from the mental health needs of Asian immigrants. However, the effects of social media intervention have not been much investigated (Fisher et al., 2015), especially for people affected by mental illness (Kaplan Robert, 2011). Therefore, because social media penetration is very high, it is necessary to understand the impact and potential benefits of social media for health care (Jose et al., 2017). In this study, the prevalence of stress among families with members experiencing mental disorders is investigated based on social media users and non-social media users. This raises questions whether they can overcome stress by using social media due to living with mentally disordered members.

2. Materials and Method
This study is descriptive, involving 160 participants in rural areas of the health care sector in Ponorogo, East Java Province from October to December 2018. The participants were selected using random sampling. Those who are categorized as social media users were interviewed with approval and involved in this study. Only those with literacy skills and age between 18 and 80 years old were included in this study. Questionnaires used to measure stress are designed based on Lazarus and Folkman theory. The questionnaires consist of 6 multiple choices (own reports), and each choice describes four situations. Each choice is rated from 0 to 4 with a total score of 0 to 24. Beck adjusts these questionnaires according to two factors consisting of stress signs and symptoms in forms of danger and challenges.

Table 1 shows the demographic characteristics of participants. The prevalence of stress is 61% (N = 192), and about 46 males (47.9%) and 50 females (52.1%) experienced stress. The difference of stress between females and males is statistically significant (p = 0.158). Seen from the use of social media, there is a significant difference of stress experienced by families who use social media and do not (p = 0.002). About 31.3% of social media users and 68.7% of non-social media users experienced stress. However, there is no significant relationship between gender, age, and job with stress. The participants were divided into two groups according to the level of education. It was found that there is a significant difference between the level of education and the use of social media (p = 0.002). Table 1 shows the frequency of stress symptoms experienced by families living with mentally disordered members.

3. Results
In this study, 160 families (81 females and 79 males) living with mentally disordered members aged 18-80 years old were investigated. The average age of the participants is 29.8 ± 9.17 years, and 66 participants (37 females and 29 males) are social network users. Table 1 shows the demographic characteristics of participants.

The results obtained have revealed that the majority of families with members who suffer from mental disorders are stressed out. This is in line with the report of critical article reviews done by Ponnet and Wouters (2014) stating that various levels of income may cause stress. Cognitive function of individuals with dementia is inversely

Table-1. The Frequency of Stress Experienced by 160 Families with Mentally Disordered Members

| Variables           | Total Families N (%) | Stressed (n=96) | UnStressed (n=64) | Results |
|---------------------|----------------------|----------------|-------------------|---------|
| Gender              |                      |                |                   |         |
| Males               | 81(50.6%) 79 (49.4%) | 46 (47.9%)     | 50 (52.1%)        | p=0.158 |
| Females             |                      |                |                   |         |
| Age                 |                      |                |                   |         |
| Under 35 years old  | 76 (47.6%) 84 (52.4%) | 44 (45.8%)     | 52 (54.2%)        | p=0.284 |
| Above 35 years old  |                      |                |                   |         |
| Education           |                      |                |                   |         |
| Basic education     | 134 (83.8%)          | 77 (80.2%)     | 19 (19.8%)        | p=0.000 |
|                     |                      |                |                   |         |
| Higher education    | 26 (16.2%)           |                |                   |         |
| Job                 |                      |                |                   |         |
| Civil               | 1 (0.6%) 20 (99.4%)  | 0 (0%) 3       | 1 (1.6%) 17       | p=0.784 |
| Private             | (12.5%) 139 (87.5%)  | (3.1%) 93 (96.9%) | (26.6%) 46      |         |
| Others              | 86.9%                |                |                   |         |
| Use of Social Media |                      |                |                   |         |
| Users               | 66 (41.3%)           | 30 (31.3%)     | 66 (68.7%)        | p=0.002 |
| Non-users           | 94 (58.7%)           |                |                   |         |

4. Discussion
The results obtained have revealed that the majority of families with members who suffer from mental disorders is stressed out. This is in line with the report of critical article reviews done by Ponnet and Wouters (2014) stating that various levels of income may cause stress. Cognitive function of individuals with dementia is inversely
proportional to the burden of care while family stress is inversely proportional to mental health, and mental health is significantly related to the quality of care (Morlett Paredes et al., 2017). Web-Based Psychoeducation Interventions can increase knowledge of schizophrenia, so it can decrease stress of people with schizophrenia and their family (Rotondi et al., 2014). Schizophrenic families tend to use problem coping focused to deal with stress (Mashudi et al., 2019). Positive family coping in the form of changing aspects of maintaining family integrity, cooperation, looking at the situation positively, and understanding the medical situation, communication with others, as well as consultation with health workers (Yusuf et al., 2012).

However, some limitations need to be considered. For example, the types of mental disorders, other clinical data and the intensity of appropriate social media usage are not properly assessed. Also, this analysis does not involve various types of mental disorders. Therefore, further analysis on variables which are not researched in this study will be interesting. Some studies found that using social media for non-cancer patients causes depression (Primack et al., 2017; Shensa et al., 2017; Sidani et al., 2016). Therefore, further investigation is required to assess the effect of each social media towards stress that families living with mentally disordered members feel.

According to some studies, the high prevalence of stress experienced by families living with mentally disordered members, easy access to social media, and available facilities may increase the effectiveness of health care. In addition, it is recommended to consider gender and level of education if psychological skill counseling and training are given as the intervention to decline stress among families with mentally disordered members.

5. Conclusion
The families who use social media are less stressed even though they live with mentally disordered members. It means social media can prevent stress.

Funding Statement
This research was funded by LPDP Indonesia through BUDI DN

Informed Consent
Informed consent was obtained from all participants involved in this study.

Ethical Approval
All procedures in this study involving human participants are in accordance with the ethical standards of the research committee at the Faculty of Public Health, Airlangga University.

Acknowledgments
The authors would like to thank LPDP as a BUDI DN Indonesia scholarship funder

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