Factors Associated with Stress Level among School Teachers at Bantaeng Regency in the COVID-19 Pandemic Era

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Abstract

The COVID-19 pandemic has a serious impact on people’s lives, including teachers. The need to continue the learning process during a pandemic has caused teachers and students to encounter many problems, including limited internet access in remote areas. Landang Elementary School (SDN 19 Landang) in Bantaeng Regency is one of the elementary schools in South Sulawesi located in the remote area facing the aforementioned problem. The teachers are forced to teach the students by home visit to provide learning activities. The condition in which people must keep their distance...
from each other to avoid the spread of COVID-19 virus yields stress. The study aims to analyze the factors that cause stress among elementary school teachers. This cross-sectional survey method involved 47 respondents using Perceived Stress Scale (PSS) on Google Form platform as the instruments. Age and teaching duration had significant association with the stress level among teachers after analysis using chi square test.

**Keywords:** Perceived Stress Scale, COVID-19, teachers, stress level

1. Introduction

Currently, in the COVID-19 pandemic condition, every job faces a certain level of stress. The many demands that must be fulfilled, especially during the pandemic makes teaching to slowly become a disruptive profession. Although it is known that teachers enjoy the pressure of work every day, teaching in this condition has become the object of extensive research.

As we are all well aware, the consequences of the COVID-19 pandemic have forced all education centers to be closed temporarily and switch to online learning. This of course makes access to education limited, especially for those in underdeveloped areas. The lack of networks and difficulty in accessing students had caused teachers in certain areas to work extra.

Many studies reported that teachers experienced higher levels of stress than other professions. Studies have shown that teachers have the highest level of work-related stress compared to people in other professions. One study reported that nearly 78% of teachers view work as a major source of stress, while the remaining 22% are those in other professions (Agai-Demjaha, 2015). Chana et al. (2020) conducted a study with subjects from six specific professions. Consistent with previous studies, teachers were found to experience the highest level of stress compared to engineers, lawyers, nurses, doctors, and insurance agents. The consequences of the stress faced and the cost it may incur, as a result, is worrying. To reduce the negative effects of stress, more attention needs to be paid during this growing pandemic.

Lack of resources, time, and support are obstacles that m limit the teachers to teach effectively (Pittman & Gaines, 2015). Research shows more than 50% of teachers have moderate to high levels of stress in teaching during the COVID-19 period (Klapproth et al., 2020). Research also shows that teachers tend to experience stress when teaching support and time for teaching are inadequate. In many remote areas in the country, due to the inadequate networks and the presence of the COVID-19 pandemic, teachers must be willing to visit students at home. The teaching duration everyday are insufficient due to lack of resources and also because teachers are not well distributed.

Landang Elementary School at Bantaeng Regency is one of many schools that has been affected by this pandemic. It is located at 20 km from the city of Bantaeng Regency. People were still conventional and teaching method were fully done face to face in classrooms. Pandemic has changed everything abruptly. The teachers and students both need to adapt to new kind of teaching platforms.
Lack of internet access, government instruction to work from home for students caused teachers to decide to keep teaching by visiting each student. For several months, this activity turned into a stress stimulus to the teachers.

In psychology, there is a term called perceived stress. Perceived stress does not measure the type or frequency of stressful events that happened to someone, but how they feel the stress is and the ability to overcome it. Individuals may have difficulties with negative life events similar to other individuals but they assess the impact or severity of these problems in different perspectives. Therefore, they show different behaviors in dealing with it. In this way, perceived stress reflects the interactions between individuals and the environment. This study observed the stress level of teachers and the associated factors.

2. Materials and Methods

This study used the cross-sectional survey method. The respondents were teachers of Landang Elementary School No 19 Bantaeng Regency (Sekolah Dasar 19 Landang) who made time to fill out the Perceived Stress Scale questionnaire via Google Form. The factors measured and analyzed were age, gender, education level, and teaching duration. Data were collected for two weeks during the month of August, 2020 and analysed using chi square test.

Perceived Stress Scale (PSS) is a measure of the degree to which situations in one’s life are appraised as stressful. The questions in the PSS ask about feelings and thoughts during the month before. Each participant filled out the PSS via Google Form. The reliability of this scale is 0.85.

Stress level of PSS were elicited using ten questions with 5-point scale for each: 0 (never), 1 (almost never), 2 (sometimes), 3 (fairly often), and 4 (very often). Participants were asked to elaborate on each response. Stress levels were categorized based on the total score: mild (0-14), moderate (15-26), and severe (26-40).

3. Results

In this study, 47 teachers of Landang Elementary School fulfilled the PSS questionnaire using Google Form. There were 72% who had severe level of stress (higher score), 24% in moderate level, and the rest 4% showed mild stress (Figure 1). In general, most of the teachers were below 40 and dominated by females (85%). A bachelor’s degree was the highest education level of respondents (93.6%) while teaching duration was more than 6 - 7 hours per day.

There was significant association between age and teaching duration (p<0.05) while gender and education level were found insignificant. (Table.1)
Table 1: Multivariate analysis

| Variables          | Mild stress | Moderate Stress | Severe Stress | Total | Percentage | p-value |
|--------------------|-------------|-----------------|---------------|-------|------------|---------|
| **Age Group**      |             |                 |               |       |            |         |
| < 40               | 0           | 3               | 18            | 21    | 43.7       | 0.015   |
| 40 – 50            | 0           | 6               | 12            | 18    | 38.3       |         |
| > 50               | 2           | 2               | 4             | 8     | 17         |         |
| **Gender**         |             |                 |               |       |            | 0.17    |
| Male               | 1           | 4               | 2             | 7     | 14.9       |         |
| Female             | 1           | 7               | 32            | 40    | 85.1       |         |
| **Education Level**|             |                 |               |       |            | 0.542   |
| Bachelor           | 2           | 11              | 31            | 44    | 93.6       |         |
| Magister           | 0           | 0               | 3             | 3     | 6.4        |         |
| **Teaching duration**|           |                 |               |       |            | 0.001   |
| 5 hours/day        | 2           | 3               | 2             | 7     | 14.9       |         |
| 6 hours/day        | 0           | 6               | 13            | 19    | 40.4       |         |
| 7 hours/day        | 0           | 2               | 19            | 21    | 44.7       |         |

4. Discussion

The COVID-19 pandemic has had a considerable impact on the education system. All levels of education providers are directed not to carry out activities as usual in the hope of reducing the spread of COVID-19. Similar measures have been taken by various countries affected by this disease, where lockdown or quarantine policies are carried out to reduce people’s interaction as an effort to
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prevent the spread of COVID-19 transmission. Teachers and students needed to adapt with the new online learning method. Unfortunately, it is not easy for some of them. Before the pandemic, very few people used online platform for learning in Indonesia. For reasons including internet access, the need for a smartphone or other gadgets and skills to access the application, many students and also teachers prefer conventional face to face learning in a classroom.

In Landang Elementary School, technology is a precious thing. No students have smartphone while parents are working as farmers or are housewives. This situation had forced the teachers to make home visits for the sake of the learning process. This has become a major challenge during the pandemic. Activities of the teacher in order to complete the lessons certainly made the teachers physically tired. Although health protocols were implemented, there were still concerns about contracting the virus. These concerns can in turn impact a teacher’s stress level.

World Health Organization (WHO) states that around 450 million people in the world experience stress (WHO, 2001). In Indonesia, it is recorded that around 10% of the total population experiences stress (Perwitasari, 2015). Having a job in an organization is certainly a source of stress for professionals. Most modern societies experience job stress which affects not only the person himself but also the organization in which the person works. Cannon was the first researcher to develop a concept of stress known as the "fight-or-flight response" in 1914. Based on this concept, "the fight-or-flight response", stress is defined as the body's response to a situation. Cannon states that stress is a homeostatic disorder that causes changes in the physiological balance resulting from physical and psychological stimuli.

Stress is the body's unspecified response to received stimuli. A person is said to be stressed when the condition or feeling experienced exceeds his perception. The amount of problems that must be faced is not proportional to the personal ability to overcome the problems. Stress arise due to internal conflicts from various external situations. The factors that cause stress include physical, environmental, cognitive, personality, and socio cultural (Mazo, 2015). The workload factor also affects the stress levels of elementary school teachers. The teaching task carried out by elementary teachers tends to be huge due to their role as classroom teachers. An elementary teacher has a longer relationship with his/her students.

Some researchers have noted that the professional activity of teachers is, in psychological terms, one of the most stressful social activities among the jobs characterized by a large number of stress factors. Stress is typical for educational activities because of saturation with stress factors such as social evaluation, uncertainty, and daily routine. A study has shown that teachers are more stressed than other professionals. According to the study, 85% of the interviewed teachers suffered from certain levels of work-related stress (Agai-Demjaha et al., 2015). Lack of resources, time, and support are obstacles that can limit a teacher’s ability to teach more effectively. Research shows more than 50% of teachers have moderate to high levels of stress in teaching during the COVID-19 period (Federkeil et al., 2020).

Research shows that teachers tend to experience stress when their support and time for teaching are inadequate. With inadequate internet access and in the situation of the COVID-19 pandemic, teachers must be willing to visit students so that their study continues. The teaching time is also insufficient because the teacher has to visit the students one by one. Stress is part of a person's life, regardless of age. Adults struggle to live a career, maintain financial security and family demands, and also maintain their responsibilities towards work.
Based on life experiences, older adults may be better able to avoid stressful situations (Blanchard-Fields, 2007). However, when they cannot avoid situations that give rise to stress, such as health problems and other stressors, they are more prone to experiencing poor physical and mental health (Charles et al., 2016). Purwindsari (2011) found that age factor is related to work stress. Based on life experience, older adults may be better able to avoid stressful situations. In our study, older age mostly showed higher stress level. This may be further caused by the continuing stressful condition of the pandemic. This study did not explore the way the teachers handled the situations.

No differences were detected in the levels of perceived work-related stress according to gender or position in the workplace. Male teachers experienced higher levels of stress than female teachers. In our findings, gender is not normally distributed since female dominated to 85%. The higher level of stress in female teachers than in male teachers is due to conflicting roles as working women and as housewives. On one side, as a home maker, they must complete all tasks at home and on the other side they are required to carry out duties at school. This is further enhanced by the pandemic whereby these teachers need to work harder due to the home visiting.

5. Conclusion and Recommendations

Teaching during the COVID-19 pandemic is a challenge for teachers, especially those with remote living conditions. Responsibility to teach is unavoidable and thus causing stress. The results showed that high stress level was found in this study population and mostly influenced by age and teaching duration. Addition of participants from other remote regions can be considered, to accurately reveal perceived stress among teachers. Furthermore, the government could provide better access to internet to overcome bad internet connection problems especially in rural areas.

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