



Resilience in health workers: The role of social support and calling

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Abstract: Health workers are professionals with high exposure to various types of stress; therefore, they need resilience to survive in their profession. This research aims to test the effect of social support and calling on resilience in health workers. It is a quantitative-correlational study conducted cross-sectionally. The instruments used were the Connor-Davidson Resilience Scale, Multidimensional Support Scale, and Calling Scale. Snowball sampling was used to identify participants, consisting of 113 health workers in East Nusa Tenggara province, Indonesia. The data were analyzed with multiple linear regression techniques. Significant effects of social support and calling were found on resilience ($p < .01$, $F = 34.224$), with calling shown to have more significant impact ($p < .01$, $F = 60.685$) and 35.3% effective contribution. Amongst the types of social support, coworkers make the most significant contribution of 11.8% ($p < .01$, $F = 14.816$), followed by family members at 9.6% ($p < .01$, $F = 11.752$). On the other hand, social support from supervisors does not affect resilience ($p > .05$, $F = 0.904$). Health workers should seek the social support they need proactively, and prospective health workers should consider their calling when choosing a career.

Keywords: calling; health workers; resilience; social support

Abstrak: Tenaga kesehatan merupakan profesi yang rentan terhadap berbagai jenis stres, sehingga memerlukan resiliensi untuk bertahan dalam profesinya. Penelitian ini bertujuan menguji pengaruh dukungan sosial dan panggilan terhadap resiliensi pada tenaga kesehatan. Penelitian ini menggunakan metode kuantitatif-korelasi dan dilakukan secara cross-sectional. Instrumen yang digunakan yaitu *Connor-Davidson Resilience Scale*, *Multidimensional Support Scale*, dan *Calling Scale*. *Snowball sampling* digunakan untuk mendapatkan 113 responden yang merupakan tenaga kesehatan di provinsi Nusa Tenggara Timur, Indonesia. Data dianalisis menggunakan teknik regresi linear berganda. Dukungan sosial dan panggilan terbukti meningkatkan resiliensi ($p < 0,01$, $F = 34,224$), dengan panggilan memberikan pengaruh terbesar ($p < 0,01$, $F = 60,685$, kontribusi efektif 35,3%). Di antara jenis dukungan sosial, rekan kerja memberikan kontribusi paling signifikan sebesar 11,8% ($p < 0,01$, $F = 14,816$), diikuti oleh keluarga sebesar 9,6% ($p < 0,01$, $F = 11,752$). Dukungan dari atasan tidak mempengaruhi resiliensi tenaga kesehatan ($p > 0,05$, $F = 0,904$). Berdasarkan temuan ini, tenaga kesehatan diharapkan lebih proaktif untuk mencari dukungan sosial yang dibutuhkan, dan calon tenaga kesehatan perlu mempertimbangkan panggilan ketika memilih karir.

Kata Kunci: *calling*; pekerja kesehatan; resiliensi; dukungan sosial

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Introduction

Health work is a job which involves a high level of risk (Russell et al., 2014). One source of stress for health workers is the demand always to be accurate and always provide the right health services for patients (Poluan et al., 2021). According to the World Confederation for Physical Therapy (Schoeb, 2016), health workers prioritize the best quality of patient care. They are required to think quickly and accurately when dealing with health problems, making as few mistakes as possible to improve patient health quality (Kossek & Perrigino, 2016). Health workers even take a professional oath to state that they are responsible for the life of every patient they treat (Omoyefa, 2010). It means that they must have the right scientific competencies and skills to improve the quality of health.

Even though they have the competence to care for patients, in practice, health workers will be faced with medical risks (Ilahi, 2018). Such risk can include a deterioration in patients' condition against the will of the health worker or the patients themselves (Dananjaya et al., 2019). In such a case, health workers have not made mistakes because the patient's health is partly beyond their control, but it can make them feel various negative emotions such as sadness and self-blame and feel that they have failed (Wahono & Ambarwati, 2020). Such feelings can impact their mental well-being, with one manifestation of this being work stress.

Health workers can experience stress when the demands of work and the resources they have are not balanced (Ito et al., 2014). Such imbalance can occur if there is a limited number of health workers in one place. The results of a World Bank survey (cited in Ferdiaz, 2020) show that the number of health workers in Indonesia is low; on average one doctor must treat 2,500 patients. This high number results in a significant increase in workload, which has the potential to cause

impacts such as work stress and burnout on health workers (Mistretta et al., 2018).

As the front line in handling COVID-19, health workers tend to experience work stress because they are a professional group with a very high risk of being exposed to the virus (Otu et al., 2020). In addition, health workers face various deaths due to COVID-19, both of patients and fellow health workers (Mukaromah, 2020; Pranita, 2020). The threat to personal safety and the fact that many patients die can make them feel anxious and depressed (Palm et al., 2004). In pandemic conditions, those exposed to high mortality rates, including the deaths of friends and loved ones, can be a traumatic experience (Taylor, 2019). The more intense the changes and pressures they face, the more they need to develop skills to survive in the challenges and obstacles (Izzaturrohman & Khaerani, 2018). It is also known as resilience.

Resilience is an inner quality that enables individuals to overcome difficulties and bounce back from failure (Connor & Davidson, 2003; Grotberg, 1999). It consists of several dimensions: (1) personal competence, high standards, and persistence; (2) trust in one's instinct and tolerance of negative effects, (3) acceptance of change and secure relationships; (4) control; and (5) the influence of belief or spirituality (Connor & Davidson, 2003; Yu & Zhang, 2007). Resilience is formed from the internal system within the individual and the external context or dynamic environment (Yates & Grey, 2012). In this study, the researchers propose that the two variables that can shape resilience in health workers are social support and calling.

Shumaker & Brownell (1984) defines social support as a process of exchanging resources between two or more individuals, which aims to improve the welfare of these recipients. According to Winefield, Winefield, & Tiggemann (1992), such support can come from family, peers, superiors, or supervisors. Previous studies have found that

social support significantly affects families with members experiencing mental disorders such as schizophrenia (Poegoeh & Hamidah, 2016) and autism (Saichu & Listiyandini, 2018). Another study by Asih et al. (2019) demonstrated the effects of self-efficacy, social support, and authentic leadership on nurse resilience. Individuals who have good social support tend to be calmer and more confident and have the resources that support their success in dealing with difficult situations (Raisa & Ediati, 2016; Taylor, 2018). Social support and resilience in medical personnel is a worthy research topic to revisit because of the significant changes related to the relationship between individuals and their social sphere during the COVID-19 pandemic.

During the pandemic, face-to-face interactions have been strictly limited to suppress transmission, so people are advised to only use online communication (Center for Disease Control and Prevention, 2021). Health workers working in health facilities are highly exposed to COVID-19, meaning there is a higher probability for them to be infected. Health workers who are confirmed to have COVID-19 will have to do self-quarantine and have to isolate themselves from families and friends and can only communicate through online interactions. Compared to face-to-face interactions, online ones are less communicative and make individuals reluctant to express themselves intensely (Kang, 2007; Wood & Smith, 2004). This study aims to explore whether the social support received by health workers from family, colleagues, and superiors during the pandemic has impacted their resilience.

Health workers rely not only on external social support but also internal motivation, which enables them to persist in their career choice. This is referred to as their calling, which Dik and Duffy (2009) define as an individual's call to approach a particular role that is considered the primary goal of their life. Individuals who work according to

their calling will give meaning in their lives (Dobrow & Tosti-Kharas, 2011). Previous research has found that such calling makes employees more committed to organizations and better able to manage the stress and anxiety related to their work (Afsar et al., 2019). Another study found that calling strongly impacts workers and can be predicted by planning for the future (Yuliawati & Ardyan, 2020). However, there are very limited research that examines how calling can affect resilience.

This study aims to prove several hypotheses. The primary hypothesis is that the resilience of health workers is influenced by social support and calling. The minor hypothesis is that the influence of social support originating from 1) family, 2) coworkers, and 3) supervisors affect the resilience of health workers, and 4) the influence of calling on the resilience of health workers.

Methods

Research Participants

The participants were 113 health workers with professions of general practitioners, specialists, nurses, and midwives in the province of East Nusa Tenggara (NTT). Sampling was conducted using the snowball technique. Many of the participants live in Kupang City (57.5%); most were female (77.9%); and the majority were aged between 26 and 30 (34.5%) and had completed their education up to undergraduate level (51.3%). Most (42.5%) were nurses and had worked for 1–5 years (40.7%). Detailed information about the participants can be found in Table 1.

Research Procedures

The data collection began with the adoption of a scale, with the process involving its translation from the original language (English) to the destination language (Indonesian).

Table 1
Participant's Demographic Data (N = 113)

Variable	%	N	Variable	%	N
Gender			Length of Work		
Male	22.1	25	<1 year	7.1	8
Female	77.9	88	1 year – 5 years	40.7	46
Age			5 years 1 day – 10 years	17.7	20
<26	17.7	20	10 years 1 day – 15 years	10.6	12
26 – 30	34.5	39	>15 years	23.9	27
31 – 35	15.9	18	Domicile		
36 – 40	11.5	13	Kupang City	57.5	65
41 – 45	10.6	12	East Sumba District	9.7	11
45 – 50	2.7	3	Central Sumba District	5.3	6
>50	7.1	8	Southwest Sumba District	5.3	6
Education			Kupang District	5.3	6
Diploma 3	33.6	38	Sikka District	3.4	4
Undergraduate	51.3	58	Alor District	2.7	3
Postgraduate	13.3	15	Rote Ndao District	2.7	3
Doctoral	1.8	2	South Central Timor (TTS) District	1.8	2
Occupation			North Central Timor (TTU) District	1.8	2
General Practitioner	10.6	12	Belu District	1.8	2
Medical Specialist	32.7	37	West Sumba District	0.9	1
Nurse	42.5	48	Ende District	0.9	1
Midwife	14.2	16	Sabu Raijua District	0.9	1

Source: Primary Data 2021

The scale to measure resilience, social support, and calling was translated and passed through an expert judgment stage, namely the assessment of the translation by experts in the related field, and a language test given to five respondents with the same characteristics as the research participants to ensure that the translation was equivalent to the original scale. The scale was then converted into the form of an online questionnaire (Google Forms). The data were taken online by sharing a Google Forms link through a WhatsApp group of health workers. The questionnaire was completed by the participants voluntarily.

Research Instruments

The scale used to measure resilience was the Connor-Davidson Resilience Scale (CD-RISC), developed by Connor & Davidson (2003), and consisting of five dimensions, namely 1) personal competence, high standards, and tenacity; 2) trust in one's instincts, tolerance of adverse effects and strengthening effects of stress; 3) positive

acceptance of change, and secure relationships; 4) control; and 5) spiritual influences. The CD-RISC consists of 25 items on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Appropriate). Examples of items on the scale were "Under pressure, I can focus and think clearly" and "I can make difficult or unusual decisions for others to choose."

The Multidimensional Support Scale (MDSS) was developed by Winefield et al. (1992) and is used to measure social support from family, coworkers, and superiors. It consists of 32 items divided into two dimensions: frequency (how often the support is received) and satisfaction (level of satisfaction with the support received). A Likert scale is used for the answer choices, from 1 (never) to 5 (always) in the frequency dimension. The satisfaction dimension uses a Likert scale with three choices 1) Better to be reduced, 2) Better to be added, and 3) Sufficient. Some examples of items on the MDSS scale are "My family makes me feel loved," "My coworkers try to understand my

problems," and "My boss listens when I share my concerns or problems."

The calling variable was measured using the Calling Scale (Dobrow & Tosti-Kharas, 2011), which consists of 12 items. On this scale, calling is a unidimensional variable; a Likert scale is also used, with responses ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Examples of items from this scale are "I enjoy working as a health worker more than anything else" and "Being a health worker is always on my mind."

Statistical Analysis

The data analysis was conducted with the help of the JASP version 0.13.1 program, using multiple linear regression tests, together with enter and stepwise methods. The enter method involves all predictors in the regression analysis at once, while the stepwise method gradually includes predictors based on their significance value (Fahrmeir et al., 2013).

Results

Validity and Reliability

The study uses the CD-RISC resilience scale, the MDSS social support scale, and the Calling scale. The CD-RISC scale has been translated into Indonesian and used in several studies (Asih et al., 2019; Octaryani & Baidun, 2018; Wahyudi, 2020). However, the other two have never previously been used in Indonesian. Therefore, it is vital to re-examine the validity and reliability of the three scales for the study.

The validity of the research instrument was tested by exploratory factor analysis (EFA) (Table 2), while Cronbach's alpha tested the reliability. On the resilience scale, the EFA results showed the presence of five factors in CD-RISC. Factor 1, namely personal competence and persistence, consisted of 13 items; Factor 2, representing

tolerance for negative impacts, consisted of four items; Factor 3, relating to control, was represented by two items; Factor 4, spiritual influence, comprised four items; and Factor 5, related to the ability to accept change and the existence of close relationships with other people, consists of two items. On the social support scale from family, coworkers, and superiors, two factors were found: Factor 1, representing frequency, consisted of 16 items; and Factor 2, related to satisfaction, which was represented by 16 items. The calling scale is a unidimensional scale with one factor, which has 12 items.

The reliability test showed that the scale of resilience, social support, and calling had acceptable reliability with Cronbach's alpha value > 0.7 . On the resilience scale, there are two dimensions with poor reliability, namely the dimensions of control and spiritual influences, but overall, they have outstanding reliability, so the researcher decided not to delete these two dimensions.

Hypothesis Testing

There are five hypotheses tested in this research. The central hypothesis was tested using multiple linear regression techniques (Table 3). The results show an effect of social support and calling on the resilience of health workers ($p < .001$, $F = 34.224$) with a practical contribution of 38.4%. Calling proved to have a more significant effect on resilience than social support ($p < .001$, $F = 60.685$), with a practical contribution of 35.3%. Social support from coworkers significantly affected resilience ($p < .001$, $F = 14.816$), with a practical contribution of 11.8%, while family support also affected resilience ($p < .001$, $F = 11.752$), with an effective contribution of 9.6%. In addition, the results show that social support from superiors does not affect the resilience of health workers ($p > .05$, $F = 0.904$).

Table 2
Exploratory Factor Analysis (EFA) Results

Variable	Factor	Range of Factor Loading Values
Resilience	1	0.349 – 0.757
	2	0.407 – 0.918
	3	0.463 – 0.883
	4	0.310 – 0.745
	5	0.461 – 0.938
Family Social Support	1	0.581 – 0.847
	2	0.418 – 0.819
Coworkers Social Support	1	0.694 – 0.872
	2	0.528 – 0.763
Supervisor Social Support	1	0.638 – 0.845
	2	0.646 – 0.852
Calling	1	0.502 – 0.836

Source: Primary Data 2021

Table 3
Data Analysis Results

Hypothesis	p-value	F	R ²	Contribution Percentage
Social Support & Calling → Resilience	<.001	34.224	0.384	38.4%
Family Social Support → Resilience	<.001	11.752	0.096	9.6%
Coworkers Social Support → Resilience	<.001	14.816	0.118	11.8%
Supervisor Social Support → Resilience	>.05	0.904	-	-
Calling → Resilience	<.001	60.685	0.353	35.3%

Source: Primary Data 2021

Discussion

This study found that social support and calling affect the resilience of health workers. Resilience is an internal quality that helps individuals to respond to failure appropriately and to bounce back from any difficulties they face (Connor & Davidson, 2003; Epstein & Krasner, 2013). The existence of resilience gives individuals the capacity to recover from negative experiences and to adapt to new situations (Asy'ari et al., 2020). According to Indirasari et al., (2019), resilience can be an internal resource that enables a person to cope with stress due to pressures and demands in the world of work. It can be formed from internal systems and individual external

conditions (Manomenidis et al., 2019). In this study, social support is a variable that represents external conditions, while calling represents an internal system. The results show that the two variables influence resilience, but calling made a higher contribution than social support. This is evidenced by the percentage of the contribution of calling to resilience of 35.3%, while social support only contributes 3.1%.

Calling is an inner condition that encourages individuals to be involved in a profession according to their life goals (Dik & Duffy, 2009; Dobrow & Tosti-Kharas, 2011). As an internal factor, it is a stronger predictor than social support because of the sense of purpose in health workers who have

such a calling. They have goals they want to achieve and will try their best to do so (Praskova et al., 2015). Calling can encourage individuals to work harder towards their goals, no matter what happens (Creed et al., 2020). This means that health workers who have a calling can survive the various difficulties they face because they have noble goals to achieve, namely helping and saving the lives of other human beings. This is supported by Afsar et al. (2018), who state that calling can encourage people to take prosocial action to help others without expecting anything in return.

In line with the previous discussion, someone who works according to their calling will believe that their work is very personally meaningful (Dik & Duffy, 2009). Those who undertake a profession based on a calling do not work only for financial reasons or career development, but also to achieve something meaningful (Wrzesniewski et al., 1997). Individuals who feel their work is meaningful will consider every task they perform to be valuable, impactful for others, and worthy of continuation (Geldenhuis et al., 2014; Wolf, 2010).

The impact of the emergence of meaningfulness can form career commitment in individuals. Career commitment is an internal motivation that encourages people to establish themselves in a career in a specific field in the long term, even though certain things must be sacrificed (Afsar et al., 2019). Adejuwon, Aderogba, & Adekeye (2015) add that workers who have a calling can determine their achievement targets and develop plans to perform their duties as best as possible, even in unfavorable conditions. These characteristics align with personal competence, high standards, and tenacity, which are dimensions of resilience related to individual competence and persistence in achieving goals even under challenging situations (Yu & Zhang, 2007). The implication is that health workers who have a calling are better prepared to face challenges at work and to be more resilient.

Individuals with a calling will try to live up to it by looking for a profession that matches their life goals and talents (Wijaya, 2021; Yuliawati & Ardyan, 2020). Dobrow (2004) explains that a calling could be formed when people work in a profession that suits their talents and meets their needs. This is also supported by Bukhori (2012), who states that the meaning of a good life will make individuals feel helpful to themselves and others around them. Therefore, health workers who have a calling will feel needed, which can foster the feeling that their job is relevant and meaningful, but also implying they need to remain resilient in the face of various difficulties that may pose risks to their profession. Consequently, calling as an internal motivation plays a much more critical role in the resilience of health workers compared to social support from others.

In their profession, health workers face various challenges, such as being placed in rural areas, or treating patients with various diseases and complications (Robertson et al., 2016). In order to survive in these conditions, they cannot rely entirely on the support of others (Witter et al., 2021), but also need certain internal qualities to meet the demands of their work (Lawrence, 2011). This conclusion is in line with the results of this research that social support makes a small contribution to the resilience of health workers.

Social support is the exchange of resources between two or more parties and comprises four forms: emotional support, instrumental support, informational support, and mentoring support (Sarafino & Smith, 2011). It plays an essential role in mental recovery after difficult situations have been (Bukhori et al., 2017). The results show that the type of social support that most contributed to resilience was that from colleagues (11.8%). Coworkers are in the same position and have the same authority as their peers. Peer support is very meaningful because its recipients feel more understood by those in the same psychological

condition and can show empathy for one another (Mead & MacNeil, 2006). Coworkers can assist in managing stress (coping) and provide a sense of community, meaning others will not feel isolated (Banks & Weems, 2014).

Support from fellow health workers is significant in providing the best quality treatment. According to Robbins, Garman, Song, and McAlearney (2012), the quality of health services is influenced by the cooperation and collaboration of health workers, who play a role in their respective responsibilities. They cannot work alone in treating patients; delegation of duties and good communication between all professionals involved are vital (Jap et al., 2019; Morley & Cashell, 2017). Therefore, social support from colleagues significantly impacts health workers, allowing them to undertake their responsibilities better. When they feel that the support from their coworkers is adequate, they will be more resilient because they will not feel as if they are struggling alone.

Family social support also contributes to the resilience of health workers, at a level of 9.6%. Even though they are not directly involved in work in the health sector, families can provide companionship, emotional understanding and reinforcement. Health workers are very vulnerable to emotional turmoil when faced with various tensions from superiors, patients, and patients' families (Wang et al., 2020). However, they are often reluctant to seek psychological treatment because of the societal belief that health workers should not have any physical or psychological illnesses (Ornell et al., 2020). Therefore, they need the help of other parties to express their emotional turmoil; in this case, their families (Wu et al., 2020). The availability of social support from families makes individuals feel valued, loved, and cared for (Sofro & Hidayanti, 2019). In line with this, Aini et al. (2021) state that positive and mutually supportive relationships

between family members can foster resilience, giving health workers someone to lean on and tell stories to, even in difficult situations.

It was found that social support from superiors did not affect the resilience of health workers. This contradicts previous studies, which have found that individuals will seek help from others who are more competent than themselves (Nadler et al., 2003). According to this point of view, health workers should have a higher tendency to ask for help from superiors or supervisors with higher competence. However, family and peer support has been demonstrated to contribute more than that from superiors towards the resilience of health workers. This is due to people's tendency to seek help from those to whom they are emotionally attached (Setiawan, 2008). A person will be more comfortable asking for support from people judged as equal or as comrades than those with higher authority (Solomon, 2004). Supervisors are often perceived as more senior figures, thus creating an emotional gap (Mead et al., 2001). As a result, health workers tend not to ask for help from superiors at work, so social support from them becomes insignificant in increasing their resilience.

Conclusion

The results show significant effects of social support and calling on resilience, with calling making the more significant contribution. Social support from colleagues and family also proved to be significant, but that from superiors had no significant effect.

This was a cross-sectional study, so was unable to observe the dynamics of the development of resilience of health worker overtime. In addition, it explicitly discusses resilience in the context of health workers and not in other high-risk professions. Further studies are recommended to examine the resilience of health workers in a time series to understand its level

over time. Research on resilience, social support, and calling could also be conducted on other high-risk professions.

In terms of practical advice for prospective students who plan to continue their studies in the health-related subject, it is recommended that they take an aptitude test and career counselling

to recognize their calling. Health workers need to be open and proactive in seeking the support needed to increase their resilience. For families of health workers, it is hoped that they can improve the quality of relationships and support provided to help health workers survive, especially in this pandemic situation.[]

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