

Coping and Stress Management Training as an Effort to Improve Stress Adaption Ability

Pelatihan Coping dan Manajemen Stres Sebagai Upaya Meningkatkan Kemampuan Adaptasi Stres

Ana Zakiyah^{1*}, Ika Ainur Rofi'ah²

¹Fundamental of Nursing Department, Bina Sehat PPNI University Mojokerto, Indonesia

²Medical Surgical of Nursing Departement, Bina Sehat PPNI University Mojokerto, Indonesia

ARTICLE INFO

ABSTRACT/ ABSTRAK

Article history

Received date
01 Mar 2023

Revised date
11 Mar 2023
12 Apr 2023
23 Apr 2023

Accepted date
26 Apr 2023

Keywords:

Health cadres;
Stress adaptation;
Stress management.

Kata kunci:

Kader kesehatan;
Adaptasi stres,
Manajemen stress.

Each interacts with the environment and gives a different response, namely a positive response and even a negative response because he considers that changing conditions is a pressure that causes stress and encourages individuals to respond to coping. The research objective was to determine the effectiveness of coping and stress management training in increasing the perception of stress in health levels before and after the intervention was given. The design used one group pre-post design. The population was 30 health cadres, and the sampling technique used total sampling. Before the activity, the respondents were given a questionnaire to determine stress levels, followed by training. The respondents applied stress management techniques within one month, after which a post-test was carried out. The instrument used the Perceived Stress Scale. The results showed that the mean stress adaptation of respondents before the intervention was 20.73, and the mean stress adaptation after the intervention was 7.83. Further analysis using a paired t-test showed a significant difference in stress adaptation between stress adaptations to health cadres before and after the intervention (p -value=0.001; α <0.05). Coping training and stress management effectively reduce stress levels to improve the quality of human life that is physically and mentally healthy.

Setiap individu dalam kehidupan sehari-hari berinteraksi dengan lingkungannya memberikan respon yang berbeda, ada yang merespon secara positif namun banyak juga yang merespon secara negatif karena menganggap bahwa perubahan kondisi tersebut sebagai suatu tekanan dalam hidupnya sehingga menimbulkan stres dan mendorong individu untuk memunculkan coping tertentu. Kader kesehatan sebagai perantara antara petugas kesehatan dan masyarakat diharapkan memiliki kemampuan mengatasi masalah yang nantinya diteruskan pada masyarakat. Desain yang digunakan adalah *one group pre-post* desain. Populasinya adalah kader kesehatan sejumlah 30 orang dan teknik *sampling* yang digunakan adalah total *sampling*. Sebelum kegiatan responden diberikan kuesioner untuk mengetahui tingkat stres, dilanjutkan dengan pelatihan dan responden menerapkan teknik manajemen stres dalam waktu 1 bulan, setelah itu dilakukan *post-test*. Instrumen yang digunakan adalah *Perceived Stress Scale*. Analisis menggunakan *paired t-test* dan didapatkan hasil p -value=0,001; α <0,05), nilai rerata sebelum intervensi 20,73 dan sesudah intervensi 7,83. Pelatihan coping dan manajemen stres efektif menurunkan tingkat stres sehingga dapat meningkatkan kualitas hidup manusia yang sehat secara jasmani dan rohani. Diperlukan kelompok kontrol untuk mengetahui perbedaannya dan kontrol pada variabel perancu.

Corresponding Author:

Ana Zakiyah

Bina Sehat PPNI University, Mojokerto. East Java

Email: ana_ppni@yahoo.com

INTRODUCTION

Individuals in everyday life interact and get benefits from their environment, but when a change occurs, it will have an impact on the individual. Some respond positively and perceive that changing conditions is a challenge in their life. Still, on the contrary, many also react negatively because they perceive that changing conditions is a pressure in their life. This situation will create stressful conditions. Stress will encourage individuals to bring up certain coping (Hendriani, 2018).

Coping is a pattern of character or behavior that can increase a person's adaptability. This includes the ability to uphold values or beliefs, the ability to solve problems, socialize, maintain health, and also the ability to maintain commitments. Coping and stress management can also be seen as cognitive and behavioral efforts that are constantly changing to be managed in the face of specific external and/or internal demands that exceed the person's resources (Baqutayan, 2015). Suppose someone succeeds in coping and is effective. In that case, someone will quickly adapt, a process of adjustment to achieve homeostasis (balance between physiology, psychology, socio-culture, intellectual and spiritual needs) (McTier et al., 2016).

Health cadres, as intermediaries between health workers and the community, are expected to have the ability to overcome problems, which can later be passed on to the community (Nurmala et al., 2018). So far, health cadres have received more material or training for physical health and Integrated Healthcare Center programs, while training for psychological needs is still rare. Thus a health promotion effort is needed in the form of training for health cadres to improve coping skills and stress management in facing continuous environmental changes to create mental resilience.

Health promotion in the form of this training is an effort to empower the community in the health sector for a process of changing behavior/learning processes in a planned way for individuals, groups, or communities to improve their abilities (knowledge-attitudes and skills) to achieve an optimal degree of healthy life (Susilowati, 2016). This aims to support government programs in strengthening family and community empowerment so that health promotion efforts become the central pillar of health development and a determining factor for sustainable development. The hope is that all sectors across sectors can play an active role in changing behavior and the environment and maintaining and improving health (Kementerian Kesehatan RI, 2015).

Thus a health promotion effort is needed in the form of training for health cadres to improve coping skills and stress management in facing continuous environmental changes to create mental resilience. Health promotion in the form of this training is an effort to empower the community in the health sector for a process of changing behavior/learning processes in a planned way for individuals, groups, or communities to improve their abilities (knowledge-attitudes and skills) to achieve an optimal degree of healthy life (Susilowati, 2016).

This is done to support government programs to strengthen family and community empowerment. Health promotion efforts become the central pillar of health development and a determining factor for sustainable development. The hope is that all sectors across sectors can play an active role in changing behavior and the environment and maintaining and improving health (Kementerian Kesehatan RI, 2015).

METHOD

This research was an experimental study (one group pre-post design). The Independent variables are coping training and stress management, and the dependent variable is stress adaptation. In this design, stress levels were measured before and after training. The population of all health cadres in Ngelom Taman Village in November 2020 was 30, and the sampling method used in the study was total sampling.

The instrument used the Perceived Stress Scale consisting of 10 items, namely the feeling of unpredictability, the feeling of uncontrollability, and the feeling of being overloaded. The validity of the instrument obtained the KMO coefficient was 0.82. Bartlett's test found 0.327, which was statistically significant (p -value<0.0001). The Cronbach Alpha coefficient was 0.72. This indicates consistency and stability through repeated measurement tests of 0.93 (Khalili, Ebadi, and Tavallai, 2017).

This intervention was training using the lecture method, brainstorming, and simulation, and the media used was audiovisual. The training materials include stress, various coping mechanisms, and stress management (affirmations, positive thinking, progressive relaxation, breathing exercises, 5-finger hypnosis, and distraction). Stress levels were measured before and after the intervention was given. The statistical test used is the paired t-test to determine the difference before and after the intervention.

The research approved the study and conducted ethical tests. Besides, it passed the ethical test and obtained a research permit from the College of Health Science Maluku Husada, Indonesia No. RK.012/KEPK/STIK/III/2020.

RESULT

Characteristics of Respondents

Table 1. Distribution of Respondents of Ngelom Village Health Cadres

	Variable	n	%
Gender	Female	30	100
	Total	30	100
Marital Status	Married	27	90
	Widower/Widow	3	10
	Total	30	100
Level of Education	Elementary School	3	10
	Junior High School	9	30
	Senior High School	17	56.7
	College	1	3.3
	Total	30	100
Employment	Housewife	8	26.7
	Private Work	9	30
	Entrepreneur	12	40
	Government Employees	1	3.3
	Total	30	100

The analysis results showed that the sex of all respondents was female, with as many as 30 respondents (100%). The proportion of marital status mostly married 27 respondents (90.0%). The proportion of the education level of most SMA/SMK was 17 respondents (56.7%). The proportion of jobs primarily self-employed was 12 respondents (40.0%).

Table 2. Distribution of Respondents by the Age of Ngelom Village Cadres in November-December 2020

Variable	Mean	Med	SD	Min-Max	95% CI Lower-Upper
Age*	39.93	39.50	7.40	28.00-54.00	37.17-42.60

*Data was normally distributed (p-value>0.05)

The analysis showed a mean age of 39.93 years, with a standard deviation of 7.40 years.

Table 3. The Average Stress Levels of Ngelom Village Cadres Before and After Intervention

Perceived Stress Scale	Mean	Med	SD	Min-Max	95%CI Lower-Upper
Before intervention*	20.73	21.00	3.33	14.00-26.00	19.49-21.98
After intervention*	7.83	8.00	1.66	4.00-11.00	7.21-8.45

*Data was normally distributed (p-value >0.05)

The analysis showed that the average stress level before the intervention was 20.73, with a standard deviation of 3.33. The average stress level after the intervention was 7.83, with a standard deviation of 1.66.

Bivariate Analysis

Table 4. The Average Perceived Stress of Ngelom Village Cadres Before and After Intervention

Perceived Stress Scale	Mean	SD	95% CI Lower-Upper	p-value
Before intervention*	20.73	3.33	19.49-21.98	0.001
After intervention*	7.83	1.66	7.21-8.45	

*Data was normally distributed (p-value >0.05)

**Significant at p-value <0.05

The analysis showed a significant difference in the mean perceived stress scale before and after the intervention (p-value=0.001; $\alpha < 0.05$).

In the aspect of unpredictable feelings, respondents felt confident in their ability to cope with personal problems, with the criterion almost often increasing to 20 respondents (66.7%). The feeling that everything is in line with expectations that initially did not exist became 19 respondents (63.3%) said almost often. Respondents were able to control feelings of irritability in the aspect of feeling uncontrolled. There was an increase in the criteria for almost often among 19 respondents (63.3%). Regarding feeling depressed, 23 (76.7%) respondents said they had hardly experienced anxiety and distress during the past month. Respondents felt better able to cope with problems when compared to others with almost often criteria 17 (56.7%) and very often 11 (36.8%). The frequency of anger due to problems that criteria cannot control rarely increased by 20 (66.7%) respondents.

Table 5. Question Item Analysis

No	Statement	Pre		Post		Pre		Post		Pre		Post		Pre		Post		Pre		Post	
		Never		Never		Rarely		Rarely		Sometimes		Sometimes		Almost Often		Almost Often		Very Often		Very Often	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
A The feeling aspect was unpredictable																					
1	Over the past month, how often have you been angry about something unexpected	1	3.3	12	40	9	30.3	17	56.7	18	60.0	1	3.3	2	6.7	0	0.0	0	0.0	0	0.0
4	During the past month, how often have you felt confident in your ability to deal with personal problems	0	0.0	0	0.0	14	46.7	0	0.0	15	50.0	5	16.7	1	3.3	20	66.7	0	0.0	5	16.7
5	Over the past month, how often have you felt that everything that happened was just as you expected	0	0.0	0	0.0	16	53.3	0	0.0	14	46.7	4	13.3	0	0.0	19	63.3	0	0.0	7	23.3
6	Over the past month, how often have you felt unable to complete the things that needed to be done	1	3.3	11	36.7	7	23.3	18	60.0	20	66.7	1	3.3	2	6.7	0	0.0	0	0.0	0	0.0
B Aspects of feeling uncontrolled																					
2	During the past month, how often have you felt in control of important things in life	1	3.3	8	26.7	8	26.7	21	70.0	21	70.0	1	3.3	0	0.0	0	0.0	0	0.0	0	0.0
7	Over the past month, how often have you been able to control irritability in your life	0	0.0	0	0.0	13	43.3	0	0.0	17	56.7	2	6.7	0	0.0	19	63.3	0	0.0	9	30.0
10	Angry over a problem that you don't feel the trouble has built up that you are unable to cope with	0	0.0	10	33.3	5	16.7	18	60.0	19	63.3	1	3.3	6	20.0	1	3.3	0	0.0	0	0.0
C Feeling of pressure																					
3	During the past month, how often have you felt restless and depressed	1	3.3	5	16.7	6	20.0	23	76.7	21	70.0	2	6.7	21	70.0	0	0.0	0	0.0	0	0.0
8	During the past month, how often have you felt more able to cope with problems compared to other people	0	0.0	0	0.0	17	56.7	0	0.0	13	43.3	2	6.7	0	0.0	17	56.7	0	0.0	11	36.8
9	During the past month, how often have you been angry because of a problem that you have no control over	0	0.0	9	30.0	8	26.7	20	66.7	20	66.7	1	3.3	2	6.7	0	0.0	0	0.0	0	0.0

DISCUSSION

Stress Level Before Given Intervention

The results of the analysis show that the average value of the stress level of respondents before being given training is 20.73 or in the moderate stress category; on the aspect of feeling unpredictable, there is emotional disturbance characterized by angry complaints as much as 60%, feeling unsure of one's ability to deal with personal problems 50%, the brotherhood is unable to complete the things that must be done 66.7%. In the aspect of feeling uncontrolled, 70% of respondents sometimes are unable to control important things in life, and 56.7% are unable to control irritability. On the aspect of feeling depressed, 70% of respondents said they are anxious and often depressed, and 56.7 feel that they rarely feel more able to overcome problems when compared to other people.

Everyone experiences stress in their daily lives, and it is a common problem in response to when the body reacts to sources of stress. The cognitive point of view emphasizes how individuals perceive and react to stressors. All individual perceptions can stimulate sympathetic system activity and stress hormone secretion (Potter & Perry, 2021). The signs and symptoms caused by a person's stress are determined by how the ability and source of stress are received; therefore, when there are so many stressor sources and the coping mechanism is not good, stress will have a negative impact (Lumban Gaol, 2016). Forms of psychic disorders that are often seen are irritability, memory weakness, inability to concentrate, unable to solve problems or tasks, overreaction to trivial things (irritability), reduced ability, inability to relax at the right time, not being able to endure sounds or other distractions, and feelings of stress (Potter & Perry's, 2021). It is generally an unpleasant or negative emotion instead of positive emotions such as joy, happiness, and love.

Differences in Stress Levels Before and After Intervention

In the aspect of unpredictable feelings, respondents felt confident in their ability to cope with personal problems, with the criterion almost often increasing to 20 respondents (66.7%). The feeling that everything is in line with expectations that initially did not exist became 19 respondents (63.3%) said almost often. Respondents were able to control feelings of irritability in the aspect of feeling uncontrolled. There was an increase in the

criteria for almost often among 19 respondents (63.3%). Regarding feeling depressed, 23 (76.7%) respondents said they had hardly experienced anxiety and distress during the past month. Respondents felt better able to cope with problems when compared to others with almost often criteria 17 (56.7%) and very often 11 (36.8%). The frequency of anger due to problems that criteria cannot control rarely increased by 20 (66.7%) respondents.

The average stress level of respondents after being given training was 7.83, or in the light category. The analysis results obtained p -value=0.001; $\alpha < 0.05$. There is a significant difference between before and after coping training and stress management. Overall, after receiving coping and stress management training, the health cadres gradually showed a change in their ability of health cadres to manage stress. In the aspect of feeling unpredictable, there is a change in the ability to understand how to control stress by changing or controlling thoughts that trigger stress. This can be seen from the respondents' answers to the component of confidence in their ability to deal with personal problems, which increased to 16.7% saying very often. In the aspect of feeling uncontrolled, it is characterized by increased awareness and ability to understand stressors which encourage subjects to carry out the process of managing stress, such as being able to control irritability in life, which increases to 30% saying very often. In the aspect of feeling depressed, there is a significant change; this can be seen from the respondents' answers about how often feeling anxious and depressed has decreased from 70% to 0%. Likewise, the emotion of anger because of intractable problems is rarely said, as much as 66.7%.

In this training, health cadres are given the material on coping and trained in applying stress management techniques in the hope that health cadres have a structured learning experience to develop their abilities into specific skills, knowledge, or certain attitudes in dealing with stressors. The stress management provided refers to the identification and analysis of problems related to stress and how to implement them with various therapeutic methods to change the source of stress or stress experiences). Some techniques taught in training include affirmations, positive thinking, progressive relaxation, five-finger hypnosis, and deep breathing. Positive thinking has a tremendous effect on reducing stress levels. If the direction set is negative, then around 60,000 thoughts will come out of the memory in a negative direction. Conversely, if the direction is positive, the same number of thoughts will also

come out of the memory in a positive direction. This aligns with several studies showing that positive thinking effectively reduces stress levels (Kooshalshah et al., 2015; Naseem & Khalid, 2010).

The second technique is affirmation. The results of the study (Sherman, 2013) state that affirmations can improve one's ability, broaden the perspective used to see information and events in life, lead to coping mechanisms against stress and reduce the impact of stress so that a person can adapt to the presence of stressors through an experience. In line with this, positive affirmations can reduce cortisol levels and improve mental health and perceived social support in postpartum blues mothers. Self-resources, for example, self-esteem and optimism, can reduce stress levels. These findings suggest that reflecting on personal values can keep neuroendocrine and psychological responses to stress at a low level.

The third technique is five-finger hypnosis. This technique is part of self-hypnosis which provides a highly relaxing effect so that it can reduce tension and stress, anxiety, and a person's thoughts. The results showed that anxiety and lack of self-confidence significantly reduced over time after undergoing hypnosis (Varga, 2020; Hammer et al., 2021). The same study was conducted by five-finger hypnosis can lower anxiety levels. Five-finger hypnosis is performed in a relaxed state; the mind focuses on memories created while touching five fingers in sequence by imagining

something. The benefits of five-finger hypnosis include increasing motivation; the mind calms down because tension is reduced. (Pardede et al., 2018; Sari et al., 2022).

The fourth technique is progressive relaxation. Someone who experiences tension and stress can increase blood pressure due to stimulation of the sympathetic nerves, so relaxation exercises will train the parasympathetic nerves, reducing the tension. This technique focuses attention on muscle activity by identifying tense muscles and then reducing tension, and doing this relaxation technique gives the feeling relaxed feeling. Progressive muscle relaxation is very effective in reducing the stress of families caring for mental disorders compared to the untreated group (Livana et al., 2018). Positive coping and stress management carried out by each individual has tremendous benefits in balancing one's psychological condition in dealing with stressors so that one can adapt to stress and not hurt the body. Ultimately, it can improve the quality of human resources who are physically and mentally healthy.

CONCLUSIONS

Coping training and stress management for health cadres effectively reduce stress levels to improve the quality of human life that is physically and mentally healthy.

REFERENCES

- Baqutayan, S. M. S. (2015). Stress and coping mechanisms: A historical overview. *Mediterranean Journal of Social Sciences*, 6(2 S1), 479. <https://doi.org/10.5901/mjss.2015.v6n2s1p479>
- Hammer, C. M., Scholz, M., Bischofsberger, L., Hammer, A., Kleinsasser, B., Paulsen, F., & Burger, P. H. M. (2021). Positive effects of medical hypnosis on test anxiety in first-year medical students. *Innovations in Education and Teaching International*, 00(00), 1–11. <https://doi.org/10.1080/14703297.2021.1886971>
- Hendriani, W. (2018). *Resiliensi Psikologi Sebuah Pengantar*. Prenada Media Group.
- Kementerian Kesehatan RI. (2015). *Permenkes No. 74 th 2015* (pp. 1–14). <http://promkes.kemkes.go.id/permenkes-no74-tahun-2015-tentang-upaya-peningkatan-dan-pencegahan-penyakit>
- Khalili, A Ebadi, A Tavallai, M. H. (2017). Validity and reliability of the Cohen 10-item Perceived Stress Scale in patients with chronic headache: Persian version. *Asian Journal of Psychiatry Volume*, 26, Pages 136-140. <https://doi.org/https://doi.org/10.1016/j.ajp.2017.01.010>
- Kooshalshah, S. F. R., Hidarnia, A., Tavousi, M., Shahmohamadi, S., & Aghdamizade, S. (2015). Effect of positive thinking intervention on the Nurses' job stress. *Acta Medica Mediterranea*, 31(7), 1495–1500. <https://www.actamedicamediterranea.com/archive/2015/special-issue-1/effect-of-positive-thinking-intervention-on-the-nurses-job-stress/document>
- Livana, P. H., Daulima, N. H. C., & Mustikasari, M. (2018). Relaksasi otot progresif menurunkan stres keluarga yang merawat

- pasien gangguan jiwa. *Jurnal Keperawatan Indonesia*, 21(1), 51-59. <https://doi.org/10.7454/jki.v21i1.362>
- Lumban Gaol, N. T. (2016). Teori Stres: Stimulus, Respons, dan Transaksional. *Buletin Psikologi*, 24(1), 1. <https://doi.org/10.22146/bpsi.11224>
- McTier, L., DeLaune, S. C., Ladner, P. K., Tollefson, J., & Lawrence, J. (2016). *Australian and New Zealand Fundamentals of Nursing*. Cengage Learning Australia.
- Naseem, Z., & Khalid, R. (2010). Positive Thinking in Coping with Stress and Health Outcomes: Literature Review. *Journal of Research & Reflections in Education (JRRE)*, 4(1), 42–61.
- Nurmala et al. (2018). *Promosi Kesehatan*. Airlangga University Press.
- Pardede, J.A., Sitepu, S.F.A., & Saragih. (2018). Pengaruh Teknik Relaksasi Nafas Dalam Dengan Terapi Hipnotis Lima Jari Terhadap Kecemasan Pre Operatif. *Jurnal Kesehatan Jiwa*, 1(10).
- Potter & Perry's. (2021). *Fundamentals of Nursing* (6th edition). Elsevier.
- Sari, S. M. S., & Putri, D. K. (2022). The 5 Finger Hypnotic Intervention Can Reduce Stress of Ners Professional Students Who Will Take the Competency Exam: Intervensi Hipnotis 5 Jari Mampu Menurunkan Stres Mahasiswa Profesi Ners Yang Akan Mengikuti Ujian Kompetensi. *Journal of Community Service and Application of Science*, 1(1), 10-15. <https://kop-kopertis.id/ojs/index.php/jcsas/article/view/26>
- Sherman, D. K. (2013). Self-Affirmation: Understanding the Effects. *Social And Personality Psychology Compass*, 7(11), 834–845. <https://doi.org/10.1111/spc3.12072>
- Susilowati, D. (2016). *Promosi Kesehatan*. Kementerian Kesehatan RI.
- Varga, K. (2020). Hypnosis: New Generation Articles. *International Journal of Clinical and Experimental Hypnosis*, 68(4), 409–411. <https://doi.org/10.1080/00207144.2020.1803639>