



Hypnocommunication on Sleep Disorders in Children with Cancer

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Abstract

Background: Children diagnosed with cancer will experience various symptoms including fatigue (fatigue), pain, nausea, vomiting, coughing, anorexia and one of them is sleep disturbance. The American Society of Clinical Oncology shows that around 52% of cancer patients report difficulty sleeping. Sleep disorders will cause drowsiness throughout the day, decreased immune system, less than optimal performance, and decreased memory. Sleep disorders can cause a person to be unproductive, unfocused, unable to make good decisions, forgetful, angry, depressed, causing the body to be vulnerable to disease.

Purpose: For this reason, the aim of this study was to determine the effect of hypnocommunication on sleep disturbances in children with cancer at Padang in 2023.

Methods: The type of this research was quasi-experiment with one group pretest and posttest design. The population was 179 people. By using purposive sampling technique, 20 children with cancer at 6 to 12 years old had been chosen as the samples. They had been given for 20 minutes of therapy hypnocommunication given before going to bed once for 3 consecutive days. This therapy uses a therapeutic communication method used by a therapist. The instrument used in this study was the SDSC (Sleep Disturbances Scale for Children) questionnaire. The data were analyzed by Wilcoxon Test. The results showed that the average score of sleep disturbance in children with cancer before and after being given hypnocommunication was 40.0 and 37.9.

Results: The test results obtained a p-value of $0.000 < (0.05 = \text{Alpha})$. Last, it can be concluded that there was an effect of giving hypnocommunication on sleep disturbances in children with cancer.

Conclusions: Therefore, it is suggested to the officers at Cahaya Community Foundation, Padang to be able to utilize hypnocommunication interventions as a technique for dealing with sleep disturbance problems in children with cancer.

Keywords:

Hypnocommunication, Sleep Disorders, Children with Cancer

Introduction

World Health Organization (WHO) in 2018 stated that around 300,000

children aged 0 to 19 years are diagnosed with cancer and around 90,000 children die as a result cancer (Fatmiwiriyastini et



al., 2021). Data WHO in 2007 said that around 12,400 people in the United States aged 0 to 20 years are diagnosed with cancer (Priliana et al., 2018). In England in 2009 - 2011, it showed that the incidence of cancer in children 1,574 new cases were found and 525 children died from cancer (Rokhaidah et al., 2018).

The prevalence of cancer in Indonesia is around 1.4 per 1000 population or around 347,792. The population experiences cancer and is ranked seventh among all types of disease which ends in death (Hartini et al., 2020). Whole Hospital Association Indonesia (PERSI, 2012) reported that the incidence of childhood cancer in Indonesia is around 2-4%. Every year there are 11,000 cases of cancer in children, and 10% in of which cancer causes death (Sri et al., 2019).

The prevalence of cancer in West Sumatra Province is around 2.4 per 1000 population higher compared to the national prevalence of around 1.7 per 1000 population and is in dire need development of appropriate prevention and control programs against cancer, especially in West Sumatra (Febrianti & Wahidin, 2021).

Based on the results of the first survey conducted by researchers, the number of children with cancer at the Cahaya Community Foundation in Padang City was 20 people. Sleep disorders can cause a person to be unproductive, unfocused, unable to make good decisions, forgetful, angry, depressed, make the body susceptible to disease, cause accidents and can even increase the risk of death (Syukriana, 2021).

Sleep disorders can disrupt the body's normal functions, which if not

treated immediately, can cause a decrease in neurological abilities, thereby affecting the patient's quality of life, immune system, cognitive abilities and ability to carry out daily activities (Delsigne, 2013) and (Coe et al., 2018). Sleep disorders not only affect physical growth but also greatly influence children's development in terms of behavior, cognitive abilities and children's ability to learn at school (Nisa et al., 2023). Disturbances in sleep quality can be overcome in various ways, including therapy *sleep hygiene*, aromatherapy, and relaxation therapy. Proven relaxation therapy which is usually done before bed Hypnocommunication has an influence on improving sleep quality. Hypnocommunication is a type of complementary therapy that aims to Healing sick minds because hypnotherapy can directly reach the subconscious mind. Once this state of deep relaxation is achieved, naturally the gates of a person's subconscious mind will open wide, so that the person concerned tends to more easily accept the healing suggestions given.

Hypnocommunication provides hypnotic suggestions and communication to guide clients to relax. After reaching a state of deep relaxation, the door to the subconscious opens, so clients are often more receptive to the treatment suggestions given (Rezkiki et al., 2022). Therapy hypnocommunication was very effective for use overcome the problem of sleep disorders, so that patients will feel safe and comfortable with sleep due to the effects of suggestion and relaxation caused by listening hypnocommunication (Szilágyi, 2018).

Communication is very important in the hypnotherapy process because

communication is the main tool in carrying out the therapy process itself. Through conscious communication (*conscious*) as well as subconscious communication (*subconscious*), a therapist can recognize the client's soul and help the client adapt to his condition. Communication used in the recovery process in the world of health is known as therapeutic communication. Therapeutic communication is an important component in nursing, because communication between nurses and patients has a therapeutic relationship aimed at the patient's recovery. So that patients will feel satisfied and comfortable with the services provided by nurses, thereby increasing the patient's enthusiasm and motivation to recover (Oktaria et al., 2017).

With the therapeutic communication method, a therapist uses the hypnosis method to direct communication in the form of positive suggestions into the client's subconscious mind so that clients who experience sleep disorders are faced with situations and message exchanges that can lead to beneficial social relationships. Building relationships is the most important thing in nursing work, especially in therapy or healing. In therapeutic communication, the therapist and client are involved in an interaction process. Through the interaction process, a reciprocal relationship occurs which is characterized by the exchange of information, behavior, feelings, thoughts and experiences (Pakpahan, 2017).

This research is research that has never been done before, where research combines hypnotherapy into therapeutic communication. This study aims to determine the level of reduction in sleep

disorders in children with cancer after receiving hypnocommunication therapy.

Methods

Research Design

The method used in this research is *Quasy Experience* with the research design *One-Group Pretest and Posttest design* used to determine the effect of hypnocommunication on sleep disorders in children with cancer at the Padang City Community Foundation which was carried out in December 2022 - February 2023 at the Padang City Community Foundation.

Setting and Samples

Sampling in this research used techniques *purposive sampling* with inclusion criteria, namely cancer children aged 6-12 years, children who experience sleep disorders such as problems initiating and maintaining sleep, breathing disorders during sleep, impaired consciousness, sleep-wake transition disorders, excessive somnolence, and hyperhidrosis during sleep. children with an SDSC questionnaire score > 39 as well as children with cancer who were at the Cahaya Community Foundation while undergoing chemotherapy with a total sample of 20 children with cancer. Initially, the researcher explained the research objectives to the respondents.

Intervention

Hypnocommunication therapy is given for approximately 20 minutes. Hypnocommunication therapy is provided by encouraging respondents to listen to hypnocommunication audio provided in a room where there is no noise so that respondents can focus. This therapy is given once for 3 days and

given at night before the child falls asleep.

Measurement and data collection

The questionnaire was filled out by respondents accompanied by their parents. Data collection was carried out using a questionnaire. The first part of the questionnaire is related to demographic variables (name, age, gender, type of cancer, class, etc.) and variables related to sleep problems. Sleep disturbance is measured by *Sleep Disturbance Scale of Children (SDSC)*. SDSC is a questionnaire developed by researcher Natalita in 2011. SDSC has 26 questions in 6 components of sleep disorders, namely disorders of initiating and maintaining sleep, disorders of breathing during sleep, disorders of consciousness, disorders of sleep-wake transition, excessive somnolence disorders, and hyperhidrosis during sleep. The score range for each question is from 1 to 5 points with a total score from 1 to ≥ 39 . An SDSC score ≥ 39 is identified as having a sleep disorder.

Data analysis

The validity and reliability of the

questionnaire have been tested in Natalita's research, 2011 with the reliability value being 0.71 and the lowest validity value being 0.40.

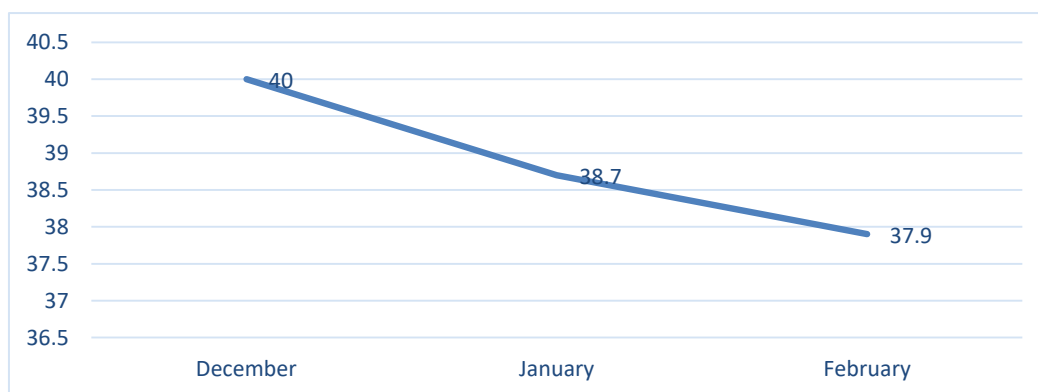
Ethical Consideration

In this research, ethics were obtained from researchers at Fort De Kock University, Bukittinggi with number 520/KEPK/XI/2022.

Results

Research conducted on 20 children with cancer who experienced sleep disorders at the Cahaya Padang Community Foundation found that the average sleep disturbance felt by cancer children before the hypnocommunication intervention was 40.0 and the average sleep disturbance felt by cancer children after the intervention was 37.9 . From the results of statistical tests, values are obtained *P-value* (0.000) is smaller than $\alpha < (0.05)$, meaning there is a difference between before and after the hypnocommunication intervention treatment for sleep disorders in children with cancer.

Figure 1. Decreased Sleep Disturbance Scores in Children With Cancer



The results of measuring sleep patterns in this study used *Sleep Disturbance Scale of Children* Child patients with cancer at the Cahaya Padang Community Foundation have problems related to sleep disorders. In this study, the results obtained from the SDSC questionnaire were children change position during sleep (80%), waking up and having difficulty going back to sleep (65%), sleepiness during the day (60%), sleeping for a long time at night 8-9 hours (55%), the child refuses to sleep (45%), the child wakes up more from 2 times (40%), children who make repetitive movements while

sleeping (25%), and children who feel afraid when going to sleep (20%). The results of this study are in accordance with research which is done by (Maliya & Anita, 2019) found that someone who experiences sleep disorders will have a negative impact on sleep quality, characterized by one or more sleep complaints such as difficulty maintaining sleep, difficulty starting to sleep or not being able to fall asleep, waking up too early in the morning, often wake up during sleep, and cannot even achieve normal sleep quality.

Table 1. The influence of hypnocommunication on sleep disorders in children with cancer.

Sleep Disorders	n	Mean	SD	P-value
Bofore	20	40,0	1,02	0,000
After	20	37,9	0,98	

Based on score results pretest and posttest from the SDSC questionnaire, it can be concluded that hypnocommunication therapy has an effect on sleep disorders in children with cancer. Hypothesis testing is carried out using *testswilcoxon* value results are obtained $P_{value} (0.000) < \alpha (0.05)$ so it can be concluded that H_0 is rejected and H_a is accepted. This means that there is a difference between the results *pretest* and *posttest*. So it can be concluded that the effect of hypnocommunication on sleep disorders in children with cancer at the Cahaya Community Foundation, Padang City.

Discussion

Sleep disorders that are often experienced by children with cancer will result in inadequate quantity and quality of sleep caused by hospital environmental

factors such as bright lighting, high noise associated with sleep disturbances and frequent nighttime medical activities as well as the effects of treatment (Rokhaidah et al., 2018). The most common symptom that occurs in children with cancer is sleep problems (Kim et al., 2020).

In this study, apart from the children being at school age, the children also had predisposing factors that caused sleep disorders, namely cancer and undergoing chemotherapy. The results of research (Ananditha, 2019) showed that there were disturbances in sleep patterns in children with cancer as evidenced by the respondents taking 2-3 hours to fall asleep, sleeping at night for 7 hours a day, respondents sleeping during the day and being lazy when they woke up in the morning.

In this research, several factors were found that influence children's sleep Due to

the light conditions in the room while sleeping, some respondents turned it off lights and also some that don't turn off the lights. Judging from the light conditions, Researchers concluded that respondents who did not turn off the lights lasted longer can fall asleep so it takes 30-45 minutes to fall asleep. Condition A bright bedroom will distract the brain so that the child spends more time sleeping can fall asleep immediately.

It can be seen from the graph that there is a comparison of the average value before being given hypnocommunication therapy, which is 40.0 and after being given hypnocommunication therapy, which is 37.9. The intervention in this study was carried out by providing hypnocommunication therapy. Respondents were given hypnocommunication once for 3 consecutive days, accompanied by their parents during the implementation. Hypnocommunication therapy can be interpreted as something that can relax the mind and body through a process that will progressively release muscle tension in every body until you can experience a decrease in the level of sleep disorders (Rezkiki et al., 2022).

In this study, it was strengthened by previous research conducted by (Deswita, 2022) the results of the study showed the value of the experimental group before being given relaxation therapy in the form of audio (p-value 0.000) with a standard deviation of 0.474. That school-aged children do relaxation therapy before going to bed indicates that the child is experiencing sleep disorders. According to researchers' assumptions, sleep disorders can be overcome in various ways, including through relaxation therapy. Several previous studies have proven that

relaxation before bed can improve sleep quality. Relaxation that is usually done before bed which has been proven to have an influence on improving sleep quality is hypnocommunication therapy (Rodgers et al., 2016).

Hypnocommunication therapy is a form of relaxation therapy. Relaxation therapy is a technique that creates relaxing conditions for the autonomic nervous system, to maintain blood supply to the muscles, and reduces oxygen consumption, heart rate, sweat, and muscle activity (Kwekkeboom et al., 2019). One of the benefits of doing hypnosis (a state like sleeping due to suggestion) is to improve a person's sleep quality (Felisiana et al., 2017).

According to researchers' assumptions, hypnocommunication therapy can reduce sleep disorders occurs in respondents and can improve the quality of sleep of respondents. After being given The intervention resulted in a reduction in sleep problems experienced by cancer children, namely children changing position during sleep (30%), child waking up having difficulty falling back asleep (45%), sleepy during the day (50%), long sleep at night 9-11 hours (65%), child refuses to sleep (35%), children who woke up more than 2 times (20%), made movements repeatedly (5%), and children who feel afraid when going to sleep (15%). Hypnocommunication therapy is given by researchers to respondents through suggestion so that it is directly responded to in the brain and directly transferred to the subconscious. This situation can increase the respondent's sense of comfort when in bed, so that the respondent can easily fall asleep, a relaxed mind reduces the occurrence of dreams, lowers the

frequency of waking up and increases the total time spent sleeping at night.

Hypnocommunication is given at night before the child falls asleep. Hypnocommunication is given for approximately 20 minutes. At the beginning of giving hypnocommunication, the child did not seem completely able to focus so the child needed approximately 10 minutes to be able to concentrate better. The respondent said that this hypnocommunication therapy could only be used properly after the second meeting because at the first meeting the respondent said he was not used to listening to the sentences given and was still wondering about the contents of this hypnocommunication therapy. Respondents used hypnocommunication therapy once a day for 3 days.

However, researchers have not found research that is the same as that of researchers conducted, but found a slight similarity in the results of research conducted by (Rezkiki et al., 2022) that the average value with decline p -value 0.001, which means that the hypnocommunication application can reduce gastritis pain in teenagers. The same research was conducted by (Maliya & Anita, 2019), based on the results of the research it was found that there was an effect of giving hypnosis therapy techniques before going to sleep on the level of sleep disorders with a value p -value 0.000 ($p < 0.05$) which shows that 16 respondents were able to sleep longer between 5-6 hours per day and not many respondents waking up at night and also starting to dream less often and after intervention the need for adequate sleep.

In this study, after the intervention was carried out, researchers found 4 respondents who did not show a decrease

in sleep disturbance scores. One of them is a 6 year old child. This is because children who are still 6 years old have a concentration that is still unable to focus and children cannot fully understand the sentences of suggestions given. Apart from that, there are also reasons why the respondent gets angry easily, changes in mood, and lacks concentration during therapy.

Hypnocommunication therapy can increase the body's endurance, when clients think positively then we can easily motivate them to do positive things too. In carrying out this research, the researcher collaborated with a hypnosis expert who had a hypnotherapist certificate with no. certificate (25438).

This hypnocommunication therapy really helps someone in forming a new habit within themselves because this relaxation technique influences the subconscious, so that good sleep habits can be formed to achieve optimal quality and quantity of sleep needs.

Implication and Limitation

This research shows that hypnocommunication is effective in treating sleep disorders, especially in children undergoing chemotherapy. This therapy can be carried out by nurses in providing nursing care so as to improve the quality of the child's sleep while being treated in hospital.

Conclusion

So it can be concluded that there is an effect of providing hypnocommunication on sleep disorders in children with cancer at the Cahaya Community Foundation, Padang City. Therefore, it is recommended that officers from the Cahaya Kota Padang

Community Foundation use hypnocommunication intervention as a technique for dealing with sleep disorders in children with cancer.

Acknowledgement

The author would like to thank Allah SWT and all parties who have helped so that this research can be completed well. Thank you very much to all respondents who were willing to take the time to fill out the questionnaire and be interviewed as well as those who provided the required data.

Author Contribution

Author is responsible for study design, data collection, analysing data, and writing the manuscript. The author read and approved the final manuscript.

Conflict of Interest

The author declares that she has no competing interests.

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How to cite: Khairi, M, et al. (2024). Hypnocommunication on Sleep Disorders in Children with Cancer. *IHSJ* 1(1), 18-27.