

THE EFFECT OF KEGEL EXERCISE ON ELDERLY WITH URINE INCONTINENCE

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ABSTRACT

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Various problems faced by the elderly include incontinence being the main complaint of the elderly. Urinary incontinence is the discharge of urine that is not digested by the elderly. Urinary incontinence will cause complications that can cause the elderly due to infection. One way to overcome all of this can be by doing Kegel exercises. The study used a pre-experimental design in the form of one group pretest-posttest without control. The results of the study describe the characteristics of age, gender, influencing the occurrence of urine iconentis in the elderly. The results of this study can be used as a reference in overcoming the problems of the elderly with urinary incontinence in the elderly. In addition, it is necessary to do it regularly in the elderly who experience urinary icontinasia.

KEYWORDS

Kegel Exercises, Elderly, Urine Incontinence



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INTRODUCTION

Like other countries in the world, Indonesia is currently also in the middle entering the aging population period (Harapan et al., 2020). This condition is certainly a

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challenge, especially in the management of a country's health programs, in general, it can be known by looking at the life expectancy of its population (Fothergill-Misbah, Walker, Kwasa, Hooker, & Hampshire, 2021). Where there is an increase in life expectancy followed by an increase in the number of elderly people. Indonesia experienced an increase in the number of elderly people from 18 million people (7.56%) in 2010, to 25.9 million people (9.7%) in 2019, and is expected to continue to increase where in 2035 to 48.2 million people (15.77%) (Center for data and information of the Indonesian Ministry of Health, 2016).

The impact of the occurrence of an aging population is the increasing proportion of the elderly to the total population in a country. Indonesia is currently heading towards an aging population with a percentage of the elderly at 9.7%, while developed countries have exceeded 10% and even Japan has exceeded 30%. The increase in life expectancy along with the increase in the number of elderly can also cause various problems health that can reduce the quality of life of the elderly. One of the health problems that are often encountered is urinary incontinence, urinary incontinence experienced a lot and need to get attention along with increasing elderly population. Every man and woman will experience a decrease in function. In the urinary system, all of this is caused by a decrease in vaginal muscle tone and the urinary tract (urethra) muscle due to a decrease in the hormone estrogen so that urine output cannot be controlled (Nian & Dhina, 2017).

The prevalence of incontinence increases during old age, according to data from the WHO (World Health Organization), it was found as many as 200 million. The world's population suffers from urinary incontinence, the total number of incontinence sufferers reaches 13 million with 85% of them being women based on the National Kidney and Urological Disease Advisory Board in the United States, (NIDDK), 2016, this range is actually still very small from the actual condition, because there are still many unreported cases.

Report of the Ministry of Health of the Republic of Indonesia, Asian Countries including Indonesia, it was found that 5,052 men who suffer from urinary incontinence problems, ranging from 15 to 30% of individuals who suffer from urinary incontinence are estimated to be over 60 years old. The prevalence of urinary incontinence in women elderly by 38% and 19% in men. The prevalence of urinary incontinence in Indonesia has reached 5.8% of the total population (Alomi, Alghamdi, Alattyh, & Elshenawy, 2018). A Prevalence Study conducted by (Amelia R, 2020) at PSTW West Sumatra found that the number of elderly people experiencing urinary incontinence was around 23.73%.

According to (Karjoyo, Pangemanan, & Onibala, 2017). High rates of urinary incontinence lead to the need for appropriate management, because if not immediately handle it, the incidence of incontinence can cause various side effects such as urinary tract infections, genital skin infections, sleep disorders, pressure sores and rash on the skin.

The incidence of urinary incontinence that continues directly can also lead to a decrease in the quality of life of the elderly, the social impacts include loss of self-confidence, avoiding social interactions and depression due to, among others, the elderly being less confident with their condition, then closing themselves off from the environment. surrounding areas, this requires socialization and useful activities, helping to treat urinary incontinence health problems experienced by every elderly by managing bladder training, such as Kegel exercises (Moa, Muscatello, Turner, & MacIntyre, 2017).

Kegel exercises are gymnastics in the form of exercises to strengthen the pelvic muscles or exercises that aim to strengthen the muscles of the pelvic floor especially the pubococcygeal muscles so that a woman can strengthen these muscles urinary tract

muscles. Kegel exercises can also cure the inability to hold urination (Darmaji, Kurniawan, Astalini, Lumbantoruan, & Samosir, 2019).

Kegel exercise is an effective non-pharmacological management of urinary incontinence which was discovered by Arnold Kegel, a gynecologist (Newman, n.d.). America in 1984. Behavioral activities such as Kegel exercises were proposed by Arnold Kegel, reported improvement/healing up to 84% with pelvic floor muscle training for women and men with various types of incontinence.

A research study conducted by (Riphah et al., 2020) in Pakistan concluded that Kegel exercises are an effective therapy for urinary incontinence in the elderly. The same research was carried out by Shahida (2018) in Banjarbaru, there was an effect of Kegel exercises on reducing urinary incontinence symptoms in the elderly. In this study, the researchers wanted to do Kegel exercises in the elderly who experience urinary incontinence who live in PSTW Sabai Nan Aluih Sicincin, West Sumatra.

RESEARCH METHOD

The research method used a pre-experimental design in the form of one group pretest-posttest without control (Ghodela, Singh, Kaushik, & Maheshwari, 2019). As for the Kegel exercise technique, the initial measurement (pre-test) is carried out, then after being given treatment, another measurement (post-test) will be carried out to determine changes in urinary incontinence from the treatment.

RESULT AND DISCUSSION

1. Characteristics of the elderly living in West Sumatra Province PSTW

The characteristics of the elderly in this study consisted of: age, gender, education, frequency of urination before and after exercise.

Table 1. Distribution of the Proportion of Characteristics of Elderly Living in PSTW

Variabel	Kategori	Frekuensi	Persentase (%)
Age	Seniors at Risk	8	66.6
	seniors	4	33.4
Gender	Man	3	25
	Woman	9	75
Education	Low	10	90.6
	Tall	2	9.4
BAK frequency Before Training	≥ 8	12	100
BAK frequency After	≥ 8	7	58.4
	< 8	5	41.6

From Table 1, the results of the analysis show that more than half of the elderly are at risk, (>70 years) (66.6%). Elderly women are dominated by elderly women (75%) with most of the education levels being low (90.6%). BAK frequency before exercise more than 8 times (100%). BAK frequency after exercise more than 8 times (58.4%).

2. Overview of urinary incontinence in the elderly before Kegel exercises

Urinary incontinence in the elderly	Mean	Median	Standard Deviation	Min	Max
Before doing Kegel exercises	10,58	10,00	2,065	8	14

Based on the results, the average frequency of urinary incontinence in the elderly before Kegel exercises had an average value of 10.58 with a standard deviation of 2.065.

3 . Overview of urinary incontinence in the elderly after Kegel exercises

Urinary Incontinence in the Elderly	Mean	Median	Standar Deviasi	Min	Max
After doing Kegel exercises	8,00	8,00	2,796	5	14

Based on the results, the average frequency of urinary incontinence in the elderly after Kegel exercises has an average value of 8.00 with a standard deviation of 2.796. So it can be concluded that there is a change in the frequency of BAK in the elderly after doing Kegel exercises.(Riswanto & Mangngi, 2021)

From the results of various other studies that have been carried out by other researchers, the results show the same results as the research conducted by (Karjoyo et al., 2017) in South Minahasa where the results showed that the frequency of urinary incontinence in the elderly was rare (83.3%). Likewise research (Amelia, 2017) in Banjarmasin where the results of research after kegel exercises in the elderly experienced mild incontinence (85.72%). From the various findings that have been carried out by several researchers, it can be concluded that this Kegel exercise can change and reduce the frequency of elderly people in BAK.

4. Effect of Kegel Exercises with Urinary Incontinence in the Elderly

Urinary Incontinence in the Elderly	Mean	N	SD
Before kegel exercises	10.56	12	2.063
After kegel exercises	8.00	12	2.797

Based on the results of the study, the average value of urinary incontinence before doing Kegel exercises with a mean of 10.56 with a standard deviation of 2.063 and the average value of incontinence after being given Kegel exercises obtained a mean of 8.00 with a standard deviation of 2.797. After the T-test dependent statistical test was carried out, it was found that the p value (0.00) 0.05. So there is an effect of BAK frequency with urinary incontinence before and after Kegel exercises in the elderly. The results of the same study were carried out by (Wilda & Andriani, 2018) in Jombang where there was an effect of Kegel exercises on the elderly experiencing urinary incontinence. A study was conducted by (Riphah et al., 2020) in Pakistan where the results obtained were Kegel exercises were an effective therapy for urinary incontinence in the elderly, both male and female. In this study, the researchers also obtained significant results when viewed from a gender perspective, where the elderly, male and female, had a significant influence.

Kegel exercises have benefits related to PC muscle function. Kegel exercises not only have many benefits for women, but also for men.(Bø & Nygaard, 2020) For men, this exercise will improve the ability to control and overcome premature ejaculation, stronger erections and increase sexual satisfaction at orgasm (Butcher et al., 2020). In addition, multiple orgasms can also be experienced by men as a result of regular Kegel exercises. In men, this exercise will also lift the testicles and tighten the cremaster muscle as well as tighten the sphincterani. This is because the PC muscle starts from the anus.

Meanwhile, for women, the advantage of doing Kegel exercises is that it is easier to reach orgasm and better orgasms are achieved because the muscles that are trained are the muscles used during orgasm.(Dubberley, 2021) Another benefit is that the vagina will be more sensitive and sensitive to stimuli, making it easier to increase sexual satisfaction, and the husband will feel a very big change because the vagina is able to grip the penis more firmly. Facilitate the birth of a baby without tearing the birth canal too much and for women who have just given birth, Kegel exercises can speed up the recovery of the vaginal condition after childbirth and of course can strengthen the skeletal muscles in the pelvic floor so that it strengthens the function of the external sphincter of the bladder, preventing uterine prolapse. Based on these findings and various other research results, it can be said that Kegel exercises are very useful in that they can strengthen the pelvic muscles, thereby helping to control urine output, preventing small bedwetting that occurs when coughing or laughing.

CONCLUSION

Based on this study, it can be concluded that there are characteristics of the elderly in this study, most of the elderly are at risk (> 70) years, male and have low education, unite with widows/widowers, most of the daily activities of the elderly are independent and more than half the health conditions of the elderly. not good. More than half had mild depression, more than half were less comfortable with their physical environment. Most of the sleep quality is poor. Based on the characteristics of the elderly living in PSTW, West Sumatra Province, which are related to the quality of sleep in the elderly, namely, age, gender and health conditions, age is the most dominant factor associated with the

sleep quality of the elderly in PSTW, West Sumatra Province.

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