

Original Article

Effectiveness of Kegel Education for The Elderly as A Form of The Authority of The Midwife in Community Midwife Care

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ARTICLE INFO	ABSTRACT
<p>Article History: Submit : Dec 18, 2021 Revised : May 20, 2022 Accepted : May 24, 2022 Online : Jun 30, 2022</p> <p>Keywords: Kegel Education, Elderly, Authority</p>	<p><i>Background:</i> The ageing process is usually characterized by physical, biological, mental, or psychosocial changes. Kegel exercises are beneficial for strengthening the double muscles of the pelvic floor, thereby strengthening the function of the external sphincter of the bladder. The research purposes were to prove the Effectiveness of Kegel Education for The Elderly as A Form of The Authority of The Midwife in Community Midwife Care</p> <p><i>Methods:</i> The method used in the pra experiment in this community service activity is divided into three stages and is supported through a pretest and posttest to evaluate activities. An evaluation is carried out after one month of providing education. The population was all older adults, and This activity was attended by 27 older adults in the Tabanan I Health Center.</p> <p><i>Results:</i> The result of the research show that the average score of the frequency of urination before being given Kegel exercises was 0.19 after being given Kegel exercises of 0.85. It also obtained an at-count value of -6.245 and a p-value of 0.000 < (0.05) so that it can be concluded that Kegel exercise education influences the elderly in the Tabanan Health Center area.</p> <p><i>Conclusion:</i> Education Kegel exercises affect urinary incontinence. Kegel exercise can stimulate and increase the activation of chemical, neuromuscular, and muscular in the pelvic muscles so that it can reduce the frequency of urination in the elderly. Providing education related to Kegel exercise will greatly assist midwives in carrying out the midwife's authority in community care.</p>
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Introduction

Midwifery services are an integral part of the health care

system. Midwifery services are services by midwives by the midwife's authority directed at realizing family welfare, especially



mothers and children, so that a happy, prosperous, and quality family can be realized (Rita, 2018). In the health care system, midwives as trained professionals have roles and strategies in reducing maternal mortality (MMR) and infant morbidity and mortality (IMR) by providing midwifery services independently, collaboratively, or by referral. One of the midwives' powers is in the care of the elderly. Physical-biological, mental or psychosocial changes will usually characterize the ageing process.

Authority is an essential part of the Law of Governance (Administrative Law) because the new government can carry out its functions based on its authority. The legitimacy of government action is measured based on the authority regulated in the legislation. Midwives provide continuous and comprehensive midwifery services, focusing on prevention, promotion based on partnerships and community empowerment, and other health workers to always be ready to serve anyone who needs it, whenever and wherever he is. To ensure this quality, a professional standard is needed to carry out all actions and care provided in all aspects of professional service to individuals, families, and communities in terms of input, process, and output.

According to WHO (2015), the number of older adults in the world in 2013-2020 will occupy the top rank compared to the age group below, namely 13.4% in 2015 and 25.3% in 2016. The increase in the elderly population in Indonesia shows a tendency to increase the number of elderly, the largest elderly

population in Indonesia is in the Minahasa area at 30.29%, and in Bali, as much as 23.69% (BKKBN, 2017; BPS, 2018, 2020). The total population of Tabanan Regency in 2020 based on the results of BPS projections based on the results of the 2010 population census was 448,000 people, consisting of 222,400 male residents and 225,600 female residents, with a population density of 533.8 people per km Tabanan Regency. In 2020 in 133,667 households. The ageing process is slowly disappearing the body's ability to replace damaged cells and maintain their typical structure and function so that they cannot withstand stimuli (such as disease) and cannot repair the damage suffered.

Urinary incontinence is one of the complaints that are often experienced by the elderly, which is usually caused by a decrease in bladder capacity and a decrease in the resistance of the striated muscles in the urethra due to physiological changes in the elderly (Putra & Widiastuti, 2020; Sutarmi, 2016). The high incidence of urinary incontinence causes appropriate treatment because if not treated immediately, incontinence can cause various discomforts such as urinary tract infections, genital skin infections, sleep disturbances, pressure sores, and rash symptoms. The popular non-operative therapy is Kegel exercise. Kegel exercise is an active essential muscle contraction exercise that aims to increase the pelvic floor muscles. Kegel exercises are beneficial for strengthening skeletal muscles in the pelvic floor, thereby strengthening the function of

the external sphincter in the bladder (Gurusinga & Sembiring, 2018; Jepisa et al., 2022; Julianti, 2017; Riswanto & Mangngi, 2021; Wilda & Andriani, 2018).

One of the most common complaints from the elderly at the Tabanan I Health Center is frequent urination. Based on the data, 60% of the elderly have a frequency of voiding > 8 Times/day, and 40% of the elderly have a frequency of voiding < 8 times/day. Urinary incontinence is one of the complaints often experienced by the elderly, which is usually caused by a decrease in bladder capacity and a decrease in the resistance of the striated muscles in the urethra due to physiological changes in the elderly (Sutarmi, 2016). The high incidence of urinary incontinence causes appropriate treatment because if not treated immediately, incontinence can cause various discomforts such as urinary tract infections, genital skin infections, sleep disturbances, pressure sores, and rash symptoms. The popular non-operative therapy is Kegel exercise. Kegel exercise is an active essential muscle contraction exercise that aims to increase the pelvic floor muscles. Kegel exercises are beneficial for strengthening skeletal muscles in the pelvic floor, thereby strengthening the function of the external sphincter in the bladder (Putra & Widiastuti, 2020). These results result in the need for education related to Kegel exercises for the elderly so that the elderly can practice Kegel exercises and reduce complaints from frequent urination.

Method

The implementation method of this community service activity is educating the elderly about the Kegel exercise. This activity is in collaboration with the Tabanan I Health Center. This research targets 27 older adults in the Tabanan I Health Center area. This activity is divided into three stages of activity. Phase I is the implementation of a survey related to the determination of existing problems and plans for solving problems. Stage I This was carried out on Saturday, September 11, 2021, and the Tabanan I Health Center officers were accompanied. Phase 2 implemented the previously prepared plan, providing education related to Kegel exercises for the elderly. This stage was carried out on Saturday, September 25, 2021. This education program was attended by 27 older adults aged 45 to 59 years. The media used in education were brochures and illustrated powerpoints so that participants could better remember what was conveyed and directly practice Kegel exercises for the elderly. Before giving education, the service team gave a test to the elderly in a questionnaire. As for the elderly who do not see the writing very clearly, the team will read the questions on the questionnaire. Stage 3 of this activity is to evaluate what has been given. The evaluation was carried out by redistributing questionnaires related to Kegel exercises to the elderly and the elderly practising Kegel exercises. As for the elderly

who cannot see the writing, the questionnaire will be read out by the team.

Results

Pre-implementation stage. This stage begins with determining the target and coordinating with public health centre officers and elderly Integrated Healthcare Center cadres to find targets and problems. Based on the discussion results, it was determined that the activity target was elderly and given information on how to educate the elderly to do Kegel exercises so that complaints of frequent urination could be reduced. This stage is also carried out in preparing questionnaires for the elderly, distributed in the early stages of knowledge assessment. This stage also cannot be separated from coordination with the officers and cadres of the elderly Integrated Healthcare Center. Some of the elderly were surveyed at the pre-implementation stage, where most of the elderly experienced complaints of frequent urination and did not know how to deal with it and did not know what Kegel exercise was.

Tabel 1 Frequency of Urination

Frequency of Urination	Frequency	Percentage (%)
Abnormal	19	70,37
Normal	8	29.63
Total	27	100,0

Based on the Table, the frequency of urination before being given Kegel exercises at the Tabanan Health Center was in the abnormal category of as many as 19 people (70.37%) and the standard category of as many as 8 people (29.63%).

Table 2. Distribution of knowledge of Kegel exercise in the elderly before education

Frequency of Urination	Frequency	Percentage (%)
Good	0	0
Enough	22	81,5
Not enough	5	18,5
Total	27	100,0

Based on The Table, it is known that the frequency of urination before being given Kegel exercises at the Tabanan Health Center was in the abnormal category of as many as 22 people (81.5%) and the standard category of as many as five people (18.5%).

Evaluation. The results of this education can be seen from the results of the questionnaire analysis after the activity. In addition to this, the results are seen from how the Kegel exercise is practiced by the elderly. This can be seen in the following Table

Table 3. Distribution of knowledge of Kegel exercise in the elderly after education

Frequency of Urination	Frequency	Percentage (%)
Good	23	85,2
Enough	4	14,8
Not enough	0	0
Total	27	100,0

Based on the Table, it is known that after being given education, 85.2% of the elderly know and can do Kegel exercises. while only 14.8% did not know and could not do Kegel exercises



Table 4. Distribution of urinary frequency in the elderly after Kegel exercise education

Frequency of Urination	Frequency	Percentage (%)
Abnormal	16	59,26
Normal	11	40,74
Amount	27	100,0

Based on the Table above, all respondents, namely 27 respondents, 59.26% of the elderly with abnormal urinary frequency and 40.74% with average urinary frequency.

Table 5. Education of Kegel Exercise in the Elderly of Tabanan Regional Health Center

Experiment	N	Mean	SD	t	p-value
Before	27	0,19	0,396	-6.245	0,000
After	27	0,85	0,362		

Based on the Table, it can be seen that the average score of the frequency of urination before being given Kegel exercises was 0.19 after being given Kegel exercises of 0.85. It also obtained an at-count value of -6.245 and a p-value of $0.000 < (0.05)$ so that it can be concluded that there is an influence of Kegel exercise education on the elderly in the Tabanan Health Center area wherein another sense, there is an increase in the knowledge of the elderly regarding Kegel exercise.

Discussion

Based on Table 1, it is known that the frequency of urination before being given Kegel exercises at the Tabanan Health Center was in the

abnormal category for as many as 22 people (81.5%). Approximately 13% to 56% of adults older than 60 and at least half of nursing homes have incontinence problems. In line with research conducted by Dahlan DA, Martiningsih (2014) under the title The Effect of Kegel Exercises on Urinary Incontinence in the Elderly at the Tresna Wherda Meci Angi Bima Social Institution, the results showed that the frequency of urination in the elderly before Kegel exercises were 32.5% experienced urinary incontinence. Moderate with a frequency of urinating 6-10 times a day, and 5% of the elderly experience severe urinary incontinence with a frequency of urinating more than ten times a day. This can be related to the age of the elderly, most of whom are already in the range of 70-75 years (52.5%) so that they can still control their cognitive in terms of urination. This percentage indicates that urinary incontinence is still high in the elderly. One of the management of elderly care that can be done is pelvic floor muscle training, initially introduced by Kegel for postnatal patients. This is in line with Agus Setyo Wahyudi (2017) research. In his pretest research, respondents' average frequency of urination was six times a day. The study results explained that using Kegel exercises targeting the pelvic muscles can increase self-esteem in the elderly who experience urinary incontinence (Khonsary, 2017; Smeltzer, 2014).

The implementation Stage begins with distributing questionnaires as an initial assessment of target knowledge related to the Kegel exercise. Before giving Kegel exercise education to the elderly at the

Tabanan Health Center, all respondents were obtained, namely 27. 81.5% of the elderly did not know about Kegel exercises, and 18.5% knew about Kegel exercises. After that, education was provided through PowerPoint and brochures related to Kegel exercises and directly practised Kegel exercises in the elderly.

This evaluation stage was carried out by giving a questionnaire after Kegel exercise education and evaluating the practice of Kegel exercise given to the elderly. The team was also accompanied and assisted by Integrated Healthcare Center cadres to evaluate by asking the elderly about urinary frequency after one month of education. Based on Table 2, it is known that before being given Kegel exercise education to the elderly at the Tabanan Health Center, all respondents, namely 27 respondents, 81.5% of the elderly, did not know about Kegel exercises, and 18.5% knew about Kegel exercises. Based on Table 3, it is known that after being given education, 85.2% of the elderly know and can do Kegel exercises. At the same time, only 14.8% did not know and could not do Kegel exercises. From the practice of Kegel exercises, all the elderly have been unable to do Kegel exercises. It can be seen that there is a difference and an increase in knowledge before and after Kegel exercise education is given to the elderly. The results of the bivariate analysis also showed an effect of providing Kegel exercise education where it was seen that there was an increase in knowledge from the elderly about Kegel exercise (Wijaya & Putri, 2017; Wilda & Andriani, 2018).

Kegel exercises can stimulate and increase the activation of chemical, neuromuscular, and muscular. In line with the research of Dahlan et al. (2014) under the title The Effect of Kegel Exercises on Urinary Incontinence in the Elderly at the Tresna Werhda Meci Angi BIMA Social Institution, this study obtained a p-value = 0.000, so it was concluded

That there was a significant difference between pre and post-Kegel exercise intervention. The results of data analysis using the Wilcoxon Signed Rank Test (pre-post in the group), measuring urinary incontinence symptoms pretest have an average value of 2.58. In contrast, the results of measuring urinary incontinence symptoms post-test get an average value of 2.92, the z value is -3.742 (base on negative rank), which means that there is an effect of Kegel exercise on decreasing urinary frequency in the elderly at the Tresna Werhda Meci Angi Bima Social Institution. Kegel exercises that are carried out regularly and regularly by the elderly provide enormous benefits for the strength of the elderly pelvic muscles so that the elderly can control the urge to urinate; kegel exercises that are carried out regularly and regularly also cause a decrease in the frequency of urination (urinary incontinence) (Daryaman, 2021; Hartini et al., 2018; Julianti, 2017; Refany et al., 2021; Riswanto & Mangngi, 2021; Wahyudi et al., 2017) This can also be seen in the frequency table for urinary distribution in the elderly after one month of Kegel exercise education. In the Table, if the distribution of average elderly increases by 40.74% from the previous 29.63%.

The Midwifery Professional Standard is regulated in the Decree of the Minister of Health of the Republic of Indonesia No. 369/MENKES/SK/III/2007. The eighth competency of midwives is that Midwives provide high-quality and comprehensive care to families, groups, and communities following local culture. Public health services aim to maintain and improve health and prevent diseases in a group and society (Alhamda & Sriani, 2018; Lestari, 2021). In carrying out their profession, the duties of a midwife are them providing guidance, care, and advice to adolescents (as prospective mothers), pregnant women, including pregnant women with high risk, mothers giving birth, postpartum mothers, breastfeeding mothers, and women. in the climetorium and menopause or the elderly. One of the efforts made by midwives is that the Integrated Healthcare Center for the elderly is an integrated service post for the elderly in a particular area that has been agreed upon, driven by the community where they can get health services. Integrated Healthcare Center for the elderly is a development of government policy through health services for the elderly whose implementation is through the Public health centre program by involving the participation of the elderly, families, community leaders, and social organizations in its implementation

Conclusion

This community service activity is one of the Tri Dharma College

activities. This community service activity was carried out at the Tabanan I Health Center. This activity was carried out to increase the knowledge of the elderly regarding Kegel exercise so that the elderly can do Kegel exercise and reduce complaints of frequent urination. The results of the evaluation appeared in the bivariate analysis where there was an influence on the Kegel exercise in the elderly, and it was seen in the evaluation one month after the education was given where the urinary frequency of the elderly had begun to decrease, which was less than eight times per day.

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