

## KEGELS EXERCISES ARE EFFECTIVE ON SEXUAL FUNCTION IN POST-MENOPAUSE ELDERLY IN THE EAST JAKARTA

Suryani Hartati<sup>1\*</sup>, Sri Laela<sup>2</sup>

<sup>1,2</sup>Department of Nursing, Institute Health of Hermina, East Jakarta, Indonesia

\*Corresponding author: suryanihartati4@gmail.com

### Abstract

**Introduction:** Elderly people experience a decline in the function of their reproductive organs, which will affect intimate relationships with their partners, thus having an impact on physiological problems regarding sexual needs, so they are expected to be able to adapt to changes by improving their sexual function by doing kegel exercises. **Objectives:** to determine the effect of kegels exercises on sexual function in the elderly in the East Jakarta area

**Methods** The research uses a quasi-experimental design with a pre-post test design without a control group, namely observations carried out before treatment and after treatment without using a control group, with a total of 27 respondents starting from May to August 2023 using the 19-item FSFI questionnaire. **Results:** The results showed that sexual scores increased by an average of 2 after Kegel exercises were carried out: sexual desire was 2, sexual arousal was 2.63, lubrication was 1.37, organism was 1, sexual satisfaction was 1.70, pain decreased by 1.19,  $p$  value = 0.000, and FSFI score  $\leq$  26.55 for 21 people (77.8%) who did not experience sexual dysfunction. **Conclusion:** Sexual function will increase if you do light exercise such as gymnastics, namely Kegels exercises. This can also reduce sexual dysfunction. This template will assist you in formatting your paper. Please, copy it on your computer and insert the text keeping the format and styles indicated. The various components of your paper (title, abstract, keywords, sections, text, etc.) are already defined on the style sheet, as illustrated by the portions given in this document.

**Keywords:** Elderly, Kegels exercises, Seksual function

### 1. INTRODUCTION

Aging population is the process of aging, namely the gradual disappearance of the tissue's ability to repair itself or replace itself and maintain its normal structure and function. The elderly slowly experience a decline in the structure and function of the elderly system itself, one of which is a decline in the reproductive system (Octascriptiriani et al., 2022). This will respond to sexual stimulation, interest, and participation in sexual activities and will be directly influenced by risk factors such as declining health, feeling unattractive, lack of privacy, and not having a partner. (Miller Carol A., 2004).

Currently, throughout the world, the number of elderly people is estimated to be more than 629 million; people will increase (1 in 10 are over 60 years old), and by 2025, elderly people will reach 1.2 billion (Nugroho, 2014). It is predicted that the number of elderly people will increase in 2020 (27.08 million), 2025 (33.69 million), 2030 (40.95 million), and 2035 (48.19

million) (Kemenkes, 2018). Based on data from the Central Statistics Agency (BPS) in 2021, the number of elderly people in Indonesia is projected to reach 19.9 percent in 2045.

Kegel exercises are light and short exercises that focus on the pelvic floor muscles. Kegels are often done by mothers after giving birth to restore the condition of the birth canal to its original shape, but this exercise can also be done by menopausal or elderly women to improve organ function, their reproduction. Kegel exercises can relax the vaginal muscles and make them wet so that both of them feel excited, thereby reducing pain during sexual intercourse (Nugrahaningtyas & Utami, 2018). Research shows that pelvic floor muscle exercises (PFME) are very effective in reducing problems arising from the urinary system (urinary incontinence), increasing pelvic floor muscle strength, and also improving a person's quality of life (Sacomori, C., Virtuosa, J.F., Kruger & Cardoso, 2015). In the Social domain in this research, one of them is related to sexual life, showing that the sexual relations of menopausal women who do regular physical exercise have significant results, the majority of them say they feel satisfied or even very satisfied with their sexual life with their husbands. Subsequent research by (Nazarpour et al., 2017) prove that sex education and kegel exercises affect the sexual function of postmenopausal women after a 12-week trial, which was found to have a greater FSFI (female sexual function index) score compared to the control group. These results show that the more menopausal women receive information and education about sex and exercise with kegels, their sexual function will tend to be better than that of those who don't. The aim of this research is to determine the effect of kegels exercises on sexual function in the elderly in the Rawa Bunga Subdistrict area, East Jakarta.

## 2. METHODOLOGY

This type of research is quantitative research using a quasi-experiment design with a pre-post test design without a control group, namely observations carried out before treatment and after treatment without using a control group. This research was carried out in May–August 2023. The population in this study were elderly people who were in the working area of Rawabunga Village Health Center, East Jakarta. Based on previous research, a purposive sampling selection process was carried out, and 4 town were obtained that had the largest number of elderly, namely town 01, 05, 08, and 09. After carrying out several studies to minimize the possibility of dropping out, the researchers only took one town that had the same number of elderly people. The largest is town 08, which is in Rawabunga Village, East Jakarta. Next, sample selection was determined using simple random sampling. The inclusion criteria were female elderly aged  $\geq 55$  years, physically and spiritually healthy, marital status married, and willingness to be a respondent by filling out an informed consent form, while the exclusion criteria were being sick and taking medication and withdrawing from being a research respondent. Based on the calculation results, the total sample that met the inclusion and exclusion criteria was 27 elderly people. Next, the respondents did elderly exercise and were taught how to do kegels exercises twice a week for 30 minutes. The duration of the activity was 3 months, using standard kegels exercise procedures. This research received permission from the provincial government of the Special Capital Region of Jakarta, PTSP No. : 10/AF.1b/31.75/2/TM.23.04/e/2023 and Health Service No. 265/HM.10.02 and ethical approval No. 102/KEPPKSTIKSC/VI/2023.

## 3. RESULTS

The number of respondents in this study was 27 elderly women. Based on age characteristics, the majority of respondents were 55-60 years, namely 48.1%. At the

educational level, the majority of respondents were at the high school education level, namely 40.7%. Based on employment status, it was found that 59.3% did not work and 81.5% did not have their own income. Based on marital status, all respondents were recorded as having been married > 30 years. Based on health problems, it was found that 19 respondents (70.4%) had no health problems and 8 other respondents did not have health problems (29.6%).

**Table 2: Frequency Distribution of Elderly women Characteristics (n=27)**

Variable	Amount	Percentage(%)
Age		
55 – 60 years old	13	48,1
61 – 66 years old	9	33,3
>67 years old	5	18,5
Education level		
Elementry school	6	22,2
Yunior haigh school	10	37,0
Senior haigh school	11	40,7
Ecupation		
Retired	1	3,7
Employee	6	22,2
Enterprenuer	4	14,8
No Job	16	59,3
Income		
Yes	5	18,5
No	22	81,5
Marriage age		
<30 year	27	100
>30 year	0	0
Health disorder		
Yes	8	29,6
No	19	70,4

Table 3 Comparison of the Results of the Female Sexual Function Index (FSFI), namely Sexual Desire, Arousal, Lubrication, Orgasm, Sexual Satisfaction, Pain During Sexual Intercourse in the Elderly Before and After Kegels Exercise Intervention

Variabel	Mean±SD Lower-Upper 95% CI	Mean	Min	Max	p
Seksual desire					
Pre-test	2,19±1,075		1	6	0,000
Post-test	4,19±0,736	+2	2	6	
Seksual arousal					
Pre-test	1,78±1,188		0	5	0,000
Post-test	4,41±1,185	+2,63	2	6	
Vagina lubrication					
Pre-test	2,41±1,394		0	5	0,000
Post-test	3,78±1050	+1,37	2	6	
Orgasm					
Pre-test	2,93±1,439		0	5	0,000
Post-test	3,93±0,917	+1	2	6	
Seksual satisfaction					
Pre-test	2,52±1,451		1	5	0,000
Post-test	4,22±1,188	+1,70	2	6	
pain					

Pre-test	4,04±1,018		2	6	0,000
Post-test	2,85±1,199	-1,19	1	5	

Sexual Function Before and After Kegels Exercise Intervention

Based on table 3, it can be seen that the sexual score experienced an average increase of 2 after Kegel exercises were carried out, sexual desire was 2, sexual arousal was 2.63, lubrication was 1.37, organism was 1, sexual satisfaction was 1.70, experienced a decrease in pain of 1.19 after carrying out Kegel exercises. So it can be concluded that there is an effect of Kegel exercise intervention on sexual desire, arousal, lubrication, orgasm, sexual satisfaction, pain during sexual intercourse  $p = 0,00$

**Table 4:** Changes in FSSI scores in the elderly before and after carrying out kegels exercise nursing procedures in Rawabunga Village ( $n=27$ )

Total Skore FSSI						
Intervention		≥26,55		< 26,55		Total
		n	%	n	%	
Kegel Exercise	Pre	10	36,03	17	63,97	27
	Post	6	22.2	21	77,8	27

From table 4, after carrying out Kegel exercises, the FSI score  $\geq 26.55$  was obtained for 6 people (22.22%) who experienced sexual dysfunction, FSI score  $\leq 26.55$  for 21 people (77.8%) who did not experience sexual dysfunction.

#### 4. CONCLUSIONS

Elderly people who underwent Kegel exercise intervention had an influence on sexual scores, experiencing an average increase of 2 after Kegel exercise was carried out, sexual desire of 2, sexual arousal of 2.63, lubrication of 1.37, organism of 1, sexual satisfaction of 1, 70, experienced and a decrease in pain of 1.19 after carrying out Kegel exercises with a value of  $p = 0.000$ . Based on the results of this analysis, it shows that sexual function will increase when doing light exercise such as gymnastics, namely Kegels training activities. This, if done regularly, can reduce the efficiency of the estrogen hormone in perimenopause. Hot flashes on the face are caused by an increase in LH pulses, so regular physical exercise regularly reduces hot flashes by lowering LH concentration (Razzak, Z. A., Khan, A. A., & Farooqui, 2019).

Kegels exercises resulted in FSFI scores  $\geq 26.55$  for 6 people (22.22%) who experienced sexual dysfunction and FSFI scores  $\leq 26.55$  for 21 people (77.8%) who did not experience sexual dysfunction. In line with the results of Arini's research , 2020 stated that women who experience complaints about their sexual function can be overcome by doing Orhiba exercises combined with kegels exercises . Problems related to sexual function during menopause can be treated with non-pharmacological methods that are known to be effective and have low risks, namely doing kegels exercises, using vaginal dilators, and lubricants (gel), and avoiding the use of vaginal sheets or tampons(Howard, 2010).

## 5. ACKNOWLEDGEMENTS

We would like thank also all data collectors and participants who the elderly participants, the head of the community health center in the East Jakarta area, and the head of RW 08, Rawa Bunga sub-district.

## 6. REFERENCES

Howard, F. M. (2010). *Pelvic pain: diagnosis and management*. St. Louis: Mosby Inc.

Kemenkes, R. . (2018). *Profil kesehatan Indonesia 2018 [Indonesia health profile 2018]*.

Miller Carol A. (2004). *Nursing Care of Older adults : Theory and Practice*. Lippincott Company. P.

Nazarpour, S., Simbar, M., Tehrani, F. R., & Majd, H. A. (2017). Effects of Sex Education and Kegel Exercises on the Sexual Function of Postmenopausal Women: A Randomized Clinical Trial. *The Journal of Sexual Medicine*, 1–9. <https://doi.org/10.1016/j.jsxm.2017.05.006>

Nugrahaningtyas, J., & Utami, W. (2018). Overview of Disease Diagnosis Who Are Impacted Earthquake and Tsunami in Palu in Unriyo Health Post in Balaroa Refugeing Camp October 30-November3, 2018. *Pendekatan Multidisiplin Ilmu Dalam Manajemen Bencana*, November 2018, 1–6.

Octascriptiriani, N., Putri, K., Tinggi, S., Kesehatan, I., Kunci, K., Seksualitas, F., & Seksualitas, F. H. (2022). *Hubungan Perubahan Fungsi Seksualitas Dengan Frekuensi Hubungan Seksual Pada Lansia Wanita Usia 45- 59 Tahun Di Kelurahan Tipar Wilayah Kerja PuskesmaS*. 11(1), 14–21.

Razzak, Z. A., Khan, A. A., & Farooqui, S. I. (2019). Effect of aerobic and anaerobic exercise on estrogen level, fat mass, and muscle mass among postmenopausal osteoporotic females. *International Journal of Health Sciences*, 13(4), 10–16.

Sacomori, C., Virtuosa, J.F., Kruger, A. P., & Cardoso, F. L. (2015). Pelvic floor muscle strength and sexual function in women. *Jurnal Fisioter Mov*. 28(4).