


Research Article


# Stop Urinary Incontinence: Keep Squeeze!

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*Abstract: Urinary incontinence is a common condition that can significantly impact an individual's quality of life. Kegel exercises have been shown to be an effective treatment option for urinary incontinence. However, little is known about the knowledge and practice of Kegel exercise among individuals with urinary incontinence. This study aimed to explore the knowledge and practice of Kegel exercise among the community. Method: A cross-sectional survey was conducted among participants, in Kepala Batas, Penang, Malaysia. A total of thirty-four subjects were voluntarily included in this study. The data was collected using online questionnaires. The IBM SPSS Statistics version 23.0 software was utilized to analyse the data. Results: Twenty-six respondents (76.5%) acknowledged having done Kegel exercise in their lifetime. Almost all the respondents answered they occasionally (33.3%) or rarely (51.9%) performed this exercise. About 97.1% stated they had been examined for their pelvic floor function. About 79.4% (27 out of 34) had the experience to stopped and starting urine during micturition. Most of the respondents reported done either occasionally or rarely (46.7%). Conclusion: This study emphasizes the need to promote awareness and education about Kegel exercise as an effective treatment option for urinary incontinence, and the need to improve access to support and treatment options for those affected by urinary incontinence. Further research is needed to determine the most effective strategies for promoting adherence to Kegel exercise and improving outcomes for individuals with urinary incontinence.*

*Keywords: Kegel exercise, pelvic floor exercise; physiotherapy management; urinary incontinence.*



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## 1.0 INTRODUCTION

The International Continence Society (ICS) defines stress urinary incontinence as a complaint of involuntary loss of urine during effort or physical exertion that predominantly affects women. (Cross et al., 2022). Approximately 30% of Malaysian women suffer from urinary incontinence. Kegel exercises also known as pelvic floor muscles exercises is the first-line treatment for this condition because it is non-invasive, no side effects, and are cost-effective. Furthermore, evidence suggests that this exercise is effective, but only when they are performed correctly and consistently.

Women may not disclose this information due to its intimate or embarrassing nature or a belief that urine leakage is a normal part of ageing and not a disease. Thus, more than 90% of women do not

seek professional help, which can lead to depression, anxiety, poor quality of life, low self-esteem, and sex life relationship issues. Additionally, there is a lack of public awareness and education about the importance of pelvic floor health and the role of Kegel exercise in managing urinary incontinence. As such, there is a need for greater awareness and education about urinary incontinence and the benefits of Kegel exercise, as well as improved access to treatment options and support for those affected by this condition. Addressing these issues can help improve outcomes and quality of life for individuals with urinary incontinence.

## 2.0 METHOD AND MATERIAL

### 2.1 Study design and location

A cross sectional study has been conducted in the community of Kepala Batas, Penang, Malaysia.

### 2.2 Data collection

A set of questionnaires was distributed via online platform (Google Forms) and data collection was out in two weeks interval from 3<sup>rd</sup> March 2023 until 17 March 2023. A complete set of questionnaires consist of demographic details, characteristics of respondents and knowledge regarding Kegel exercise, exercise performance and previous assessment of pelvic floor muscles were distributed. Estimated time for respondent to answer all questions around five to ten minutes.

### 2.3 Sample size

A total of 34 respondents were voluntarily selected for this study.

### 2.4 Data analysis

Selected data were analyzed using the IBM SPSS Statistics version 23.0 software (IBM Corp., USA). Data cleaning was done by fixing or removing any incorrect or duplicated data within the dataset prior to data analysis. The descriptive analysis that used in this study is to identify the percentage of the demographic data and knowledge of Kegel exercise.

## 3.0 FINDINGS

### 3.1 Demographic data of respondents

**Table 1.** Demographic characteristics and key responses of respondents: N=34

Demographic data	Percentage (%)
Gender	
• Male	17.6
• Female	82.4
Age	
• 19-25	58.8
• 26-35	2.9
• 36-45	14.7
• 46-55	23.5
Marital status	
• Single	64.7
• Married	35.3

Education background	
• Primary / Secondary school	5.9
• Diploma / Bachelor degree	85.3
• Postgraduate	8.8
Working Background	
• Student	58.8
• Professional/Executive	14.7
• Non-Executive	11.7
• Self-employed	2.9
• Housewife	11.7
Menopausal status	
• Yes	14.7
• No	85.3

Demographic data of respondents based on gender, age, marital status, education, and working background are shown in Table 1. There were 34 respondents who participated in the survey has completed the questionnaire through the online method. In the survey, 14.7% of respondents were menopausal.

### 3.2 Respondent characteristics

**Table 2.** Summary of respondent characteristics

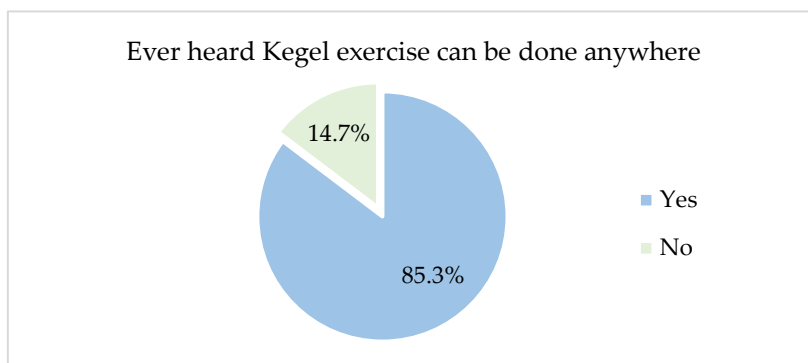
<b>Respondent characteristics</b>	<b>Percentage of the respondent (%)</b>
Ever heard of Kegel exercise	97.1
Non-Medical sources	
Friend	2.9
Family	2.9
Internet and social media	38.2
Medical sources	
Physician	2.9
Physiotherapist	44.1
Prenatal class	8.8
Ever perform Kegel exercise	76.5
Performance on Kegel exercise	
Daily	3.7
2-3 times/week	7.4
Weekly	3.7
Occasionally	33.3
Rarely	51.9
Previous assessment on pelvic floor function	97.1
Ever stopped and started urine stream during voiding	79.4

Frequency of stopped and started urine stream during voiding

Every time urinate	6.7
Occasionally	46.7
Rarely	46.7

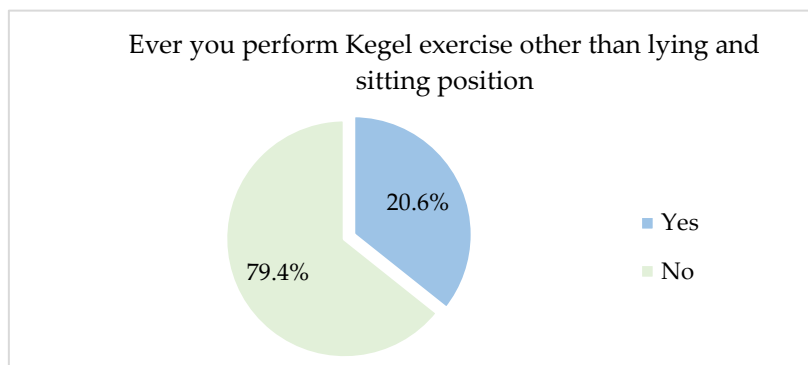
Table 2 showed a summary of the respondent characteristic. Thirty-three out of thirty-four respondents reported they were familiar with Kegel exercises. Among the 15 responders, 13 (38.2%) claimed they learned about Kegel exercise via magazines, one (2.9%) from family, and one (2.9%) from a friend. A total of 18 respondents (55.7%) reported they had learned about Kegel exercises from medical sources; of these, 15 (44.1%) had heard it from a physiotherapist, 3 (8.8%) had gone to a prenatal class, and 1 (2.9%) had heard it from a medical professional.

Twenty-six respondents (76.5%) acknowledged having done Kegel exercise in their lifetime. Almost all of the respondents answered they occasionally (33.3%) or rarely (51.9%) performed this exercise. About 97.1% stated they had been examined for their pelvic floor function. About 79.4% (27 out of 34) had the experience to stopped and starting urine during micturition. Most of the respondents reported done either occasionally or rarely (46.7%).



**Figure 1.** Performing Kegel exercise

According to the majority of respondents (85.3%), Kegel exercise can be done anyplace. However, five of the 34 respondents were unaware of this knowledge (figure 1).



**Figure 2.** Positioning of Kegel exercise

More than half of the respondents (79.4%) mostly perform either lying or sitting positions compare to seven respondents who only performed Kegel exercises in a different position.

#### 4.0 DISCUSSION

Results suggest that there is relatively high awareness and knowledge of Kegel exercises among the respondents. 97% respondents reported having heard of Kegel exercises before, which is a positive finding that suggests that education and awareness campaigns may be effective in spreading the word about the benefits of Kegel exercises.

However, the frequency of performing Kegel exercises among the respondents was lower than expected, with over half (51.9%) reporting that they perform Kegel only rarely. This is an important finding, as regular and consistent practice of Kegel exercises is necessary to strengthen the pelvic floor muscles and improve urinary incontinence symptoms. It also highlights the need for additional education and support to encourage individuals to make Kegel exercises a regular part of their daily routine. Park and Kang (2014) suggest that reinforcement of pelvic floor muscles and Kegel exercise was indeed a safe method of intervention.

The most cited sources of information about Kegel exercises were physiotherapists (44.1%) and the internet and social media (38.2%), suggesting that healthcare professionals and online resources can play a key role in disseminating information about Kegel exercises to the public. However, it is also important to consider the quality and accuracy of information provided by online sources, as not all sources are reliable, and evidence based.

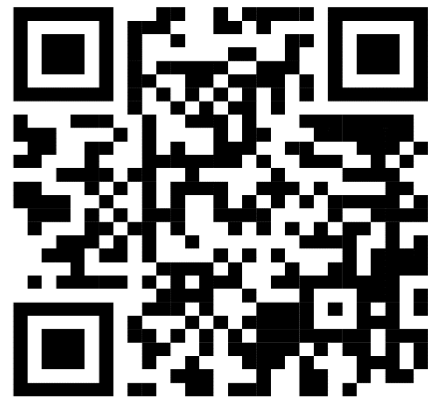
In conclusion, while the results suggest that there is a good level of awareness and knowledge about Kegel exercises among the respondents, there is also room for improvement in terms of encouraging more regular and consistent practice of these exercises. Healthcare professionals and online resources can play a key role in disseminating information about Kegel exercises, and continued efforts to promote education and awareness of pelvic floor muscles health may help improve outcomes for individuals with urinary incontinence.

#### 5.0 CONCLUSION

This study emphasizes the need to promote awareness and education about Kegel exercise as an effective treatment option for urinary incontinence, and the need to improve access to support and treatment options for those affected by urinary incontinence. Further research is needed to determine the most effective strategies for promoting adherence to Kegel exercise and improving outcomes for individuals with urinary incontinence.

Overall, promoting innovation to create awareness about Kegel exercise can help improve adherence and outcomes for individuals with urinary incontinence. By utilizing technology, community events, and collaboration with healthcare providers, individuals can be encouraged and supported to incorporate Kegel exercise into their daily routine.

Thus, a short, fast and compact video has been published to promote and enhance person with incontinence to keep perform Kegel exercise every time and everywhere they can. The screenshot of the engagement video is in figure 5.1 as well as QR code (figure 5.2) for the video.



**Figure 5.1:** Screenshot of engagement video on Kegel Exercise    **Figure 5.2:** QR code for tutorial video on Kegel Exercise

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