




1,2,3, Squeeze. Combat Incontinence!

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Abstract: Urinary incontinence is defined as any complaint of involuntary or unintentionally urine leakage which further cause hygienic issue as well as psychological mix-up resulting in social withdrawal problem. It is very common condition especially among women, but it is also affecting male. Since less awareness and lack of concern regarding urinary incontinence, the prevalence of this condition remains high. So, the purpose of this study is to determine the knowledge regarding urinary incontinence among general population in Malaysia. Method: 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: There is fifty percent only of the respondent understanding on general knowledge of urinary incontinence and less than thirty percent know the reason led to incontinence. However, majority of the respondents (>75%) are agree pelvic floor exercise are helpful to improve incontinence. Conclusion: A better and comprehensive understanding regarding urinary incontinence including the risk factors and its management are crucial and needed to enhance knowledge. By using an informative pamphlet with tutorial video on pelvic floor exercise, it may help in increasing level of knowledge regarding urinary incontinence and its management which may promoted better lifestyle outcome.

Keywords: pelvic floor exercise; physiotherapy management; urinary incontinence.



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1. INTRODUCTION

Urinary incontinence refers to the inability to control urination as well as the complaint of involuntary loss or leakage of urine (Yusof, Bachik, Soon & Kiau, 2019). The condition affects both sexes but females are more frequent than males to experience urinary incontinence at any age group (Vaugh & Markland, 2020). There are about 30% of Malaysian women were experiencing urinary incontinence mainly due to complication after pregnancy and in post-menopausal women (Yusof, Bachik, Soon & Kiau, 2019). Bladder control problems can have a significant burden on health-related quality of life and strongly linked with societal withdrawal (Aoki et al., 2017) However, incontinence is frequently reversible and manageable.

According to National Institute of Aging (2022), during urination, the muscles in the bladder contract to force urine into the tube-shaped urethra while the muscles around the urethra also relax at this time, allowing the urine to excrete from the body. Urinary incontinence can occur when the muscles in and around the bladder are malfunction leading to leakage of urine. The urinary incontinence can result from multiple factors such as weakening of pelvic floor muscle, damage to bladder-controlling nerves for example in diabetes mellitus and Parkinson patients, urinary tract infection and uterus prolapse. Disorder of the prostate gland is the most common problem lead to urinary incontinence among men.

The management of urinary incontinence is broad and one of the conservative treatments for urinary incontinence is physiotherapy. Clinical studies show that healthy eating, avoiding constipation, losing weight, and exercising are helpful in reducing the symptoms of urine incontinence (Demaagd & Davenport, 2012). Thus, it is beneficial to have enough knowledge to recognize the symptoms that contributing to this incontinence which depends on the type of the urinary incontinence. The purpose of this study is to determine the level of knowledge on the risk, symptoms, and management of the urinary incontinence among Malaysian citizen. Results from the study may help in developing an innovation education material which are pamphlet and tutorial video of exercise that will enhance better knowledge on subject matter.

2. METHOD & MATERIAL

2.1 Study design and location

A cross sectional study has been conducted at Universiti Teknologi MARA, Cawangan Pulau Pinang Kampus Bertam. This campus is a health campus which comprise of faculty of health sciences and faculty of pharmacy. Faculty of health sciences consist of various fields such as physiotherapy, nursing, occupational therapy, environmental health and medical lab technology.

2.2 Data collection

Data collection was carried out in two weeks interval from 3rd October 2022 until 15 October 2022 via online platform (Google Forms). A complete set of questionnaires with demographic details and knowledge regarding urinary incontinence in term of risk factors, symptoms, impact, prevention and its treatment were distributed. It is estimated that respondent will take around five to ten minutes to answer all the questions.

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 on urinary incontinence.

3. FINDINGS

3.1 Demographic data of respondents

A total of 34 respondents were participated in this survey. Demographic data of respondents based on gender, age, marital status and education level are shown below in table 3.1.

Table 1. Demographic characteristics and key responses of respondents (n=34)

Demographic data	Percentage (%)
Gender	
Male	35.3
Female	64.7
Age	
19-29	55.9
30-39	11.8
40-49	8.8
50-59	20.6
60-69	2.9
Marital status	
Single	52.9
Married	47.1
Education background	
SPM/O-Level	26.5
Diploma	29.4
Bachelor degree	38.2
Master	2.9
PhD	2.9
General knowledge on urinary incontinence	
Yes	50
No	35.3
Maybe	14.7
Do you know the causes of urinary incontinence	
Yes	26.5
No	47.1
Maybe	26.5

3.2 Descriptive knowledge regarding urinary incontinence

Half of respondents do not know about this condition (50.2%) and only 26.5% of the respondents understand the causes of urinary incontinence.

3.3 Descriptive analysis on the risks of urinary incontinence

Majority of the respondents with more than half of them were correct regarding risk of urinary incontinence. Bar chart regarding knowledge of the risk for urinary incontinence is illustrated in figure 1.

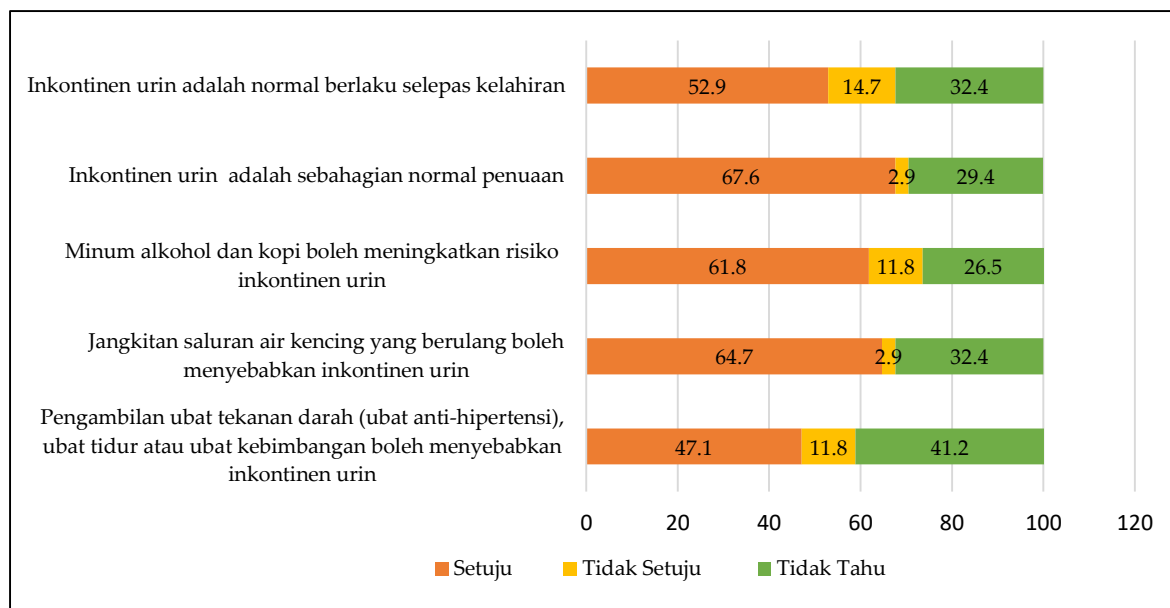


Figure 1. Knowledge on the risks of urinary incontinence

3.4 Descriptive analysis on the symptoms of urinary incontinence

More than 75% of the respondents were agree that incontinence is accidentally occurs, while 82.4% respondents agreed sneezing and coughing can contribute to urinary incontinence. Details analysis on knowledge regarding symptoms of urinary incontinence can be seen in figure 2.

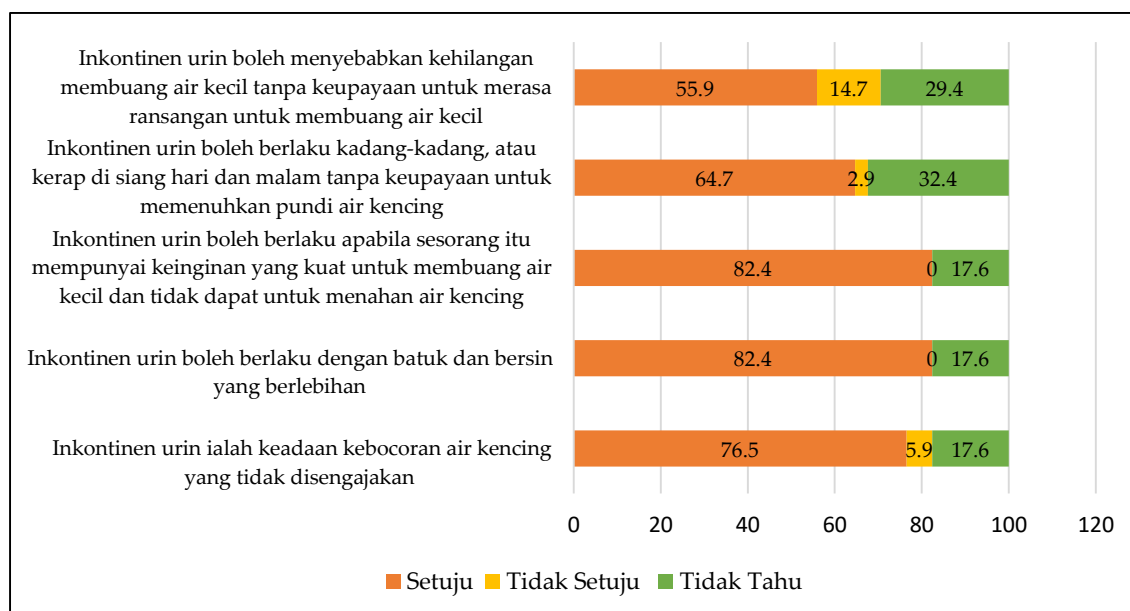


Figure 2. Knowledge on the risks of urinary incontinence

3.5 Descriptive analysis on the impact of urinary incontinence

Majority of the respondents which is 70.6% were agree and correct regarding impacts related to urinary incontinence. However, there are 38.2% of the respondents do not know and do not agree that urinary incontinence can affecting someone in daily living and during sexual activity. Figure 3 shows the bar chart regarding the knowledge on impact of urinary incontinence.

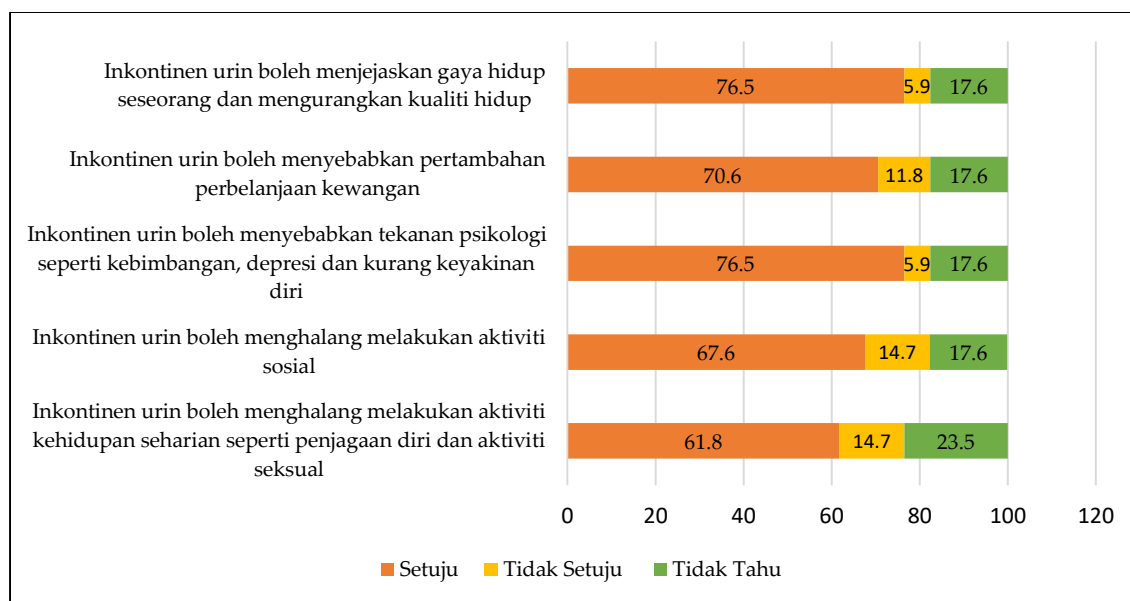


Figure 3. Knowledge on the impact of urinary incontinence

3.6 Descriptive analysis on the prevention of urinary incontinence

About 85% of respondent aware that pelvic floor exercise can reduce urinary incontinence. In the overall knowledge on prevention of urinary incontinence, it is shows that less than 60% of the respondents are agree obesity management, no smoking, disease control and avoiding constipation can reduce risk of urinary incontinence. The details of the information are depicted in figure 4.

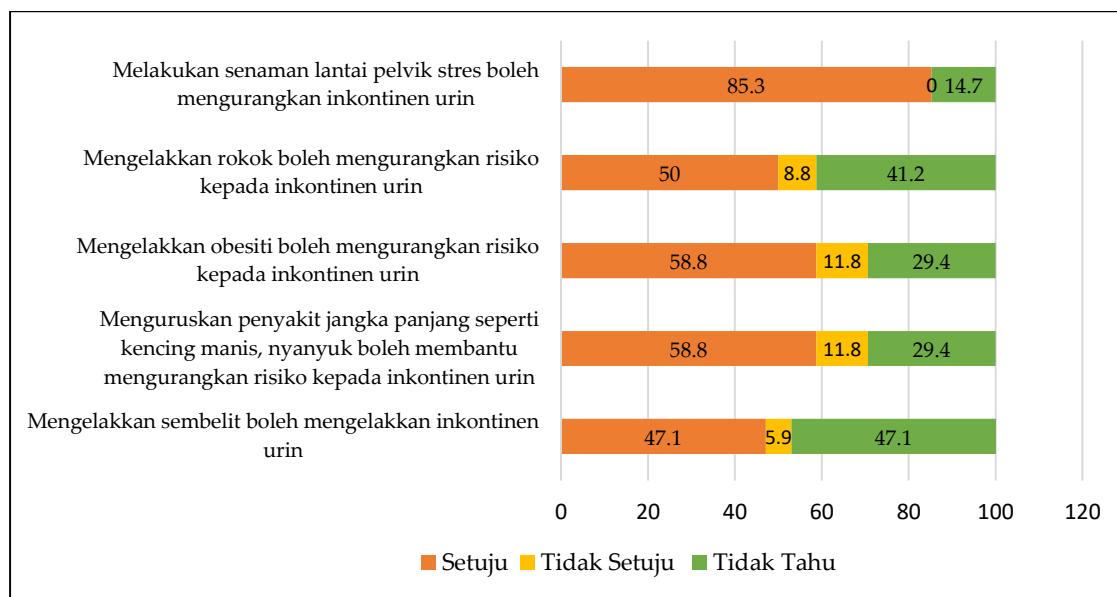


Figure 4. Knowledge on the prevention of urinary incontinence

3.7 Descriptive analysis on the treatment of urinary incontinence

Unfortunately, most of the respondent do not agree on treatment option for urinary incontinence such as medication, operation and toilet training which is 65.4%. However, majority of

the respondents (76.5%) agree that pelvic floor exercise is one of the important managements for urinary incontinence as shown in figure 5.

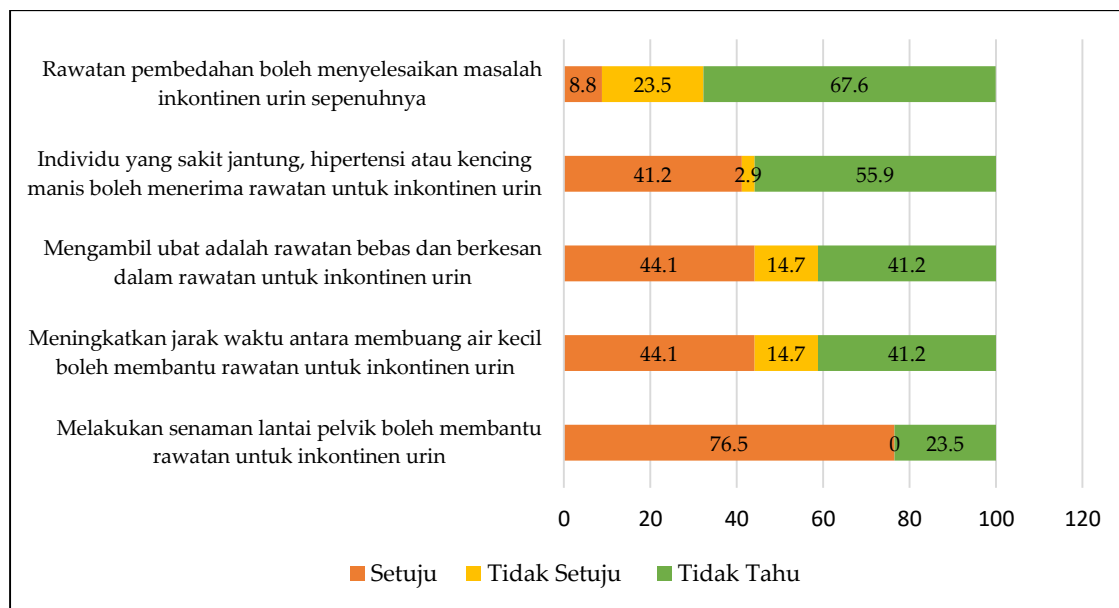


Figure 5. Knowledge on the prevention of urinary incontinence

4. DISCUSSION

Reducing prevalence of urinary incontinence especially among Malaysian may give impact productivity in lifestyle and enhancing quality of life. From this survey, shown that there is gap of knowledge about urinary incontinence, whereby most of respondent (47.1%) do not know the causes of incontinence and some of response (26.5%) was not sure about it.

A survey conducted in this study revealed that respondents were able to identify some of the common risk factors of urinary incontinence. However, those associated with hypertension medications and anxiety were not identified as risk factors. This risk factor is consistent with the findings of previous studies (Nguyen, Hunter & Wagg, 2013).

Pelvic floor exercise has been noticed by most of people to improve urinary incontinence. It shows that respondent was agreed it is can be part of prevention (85.3%) and also a treatment (76.5%) for this disorder. The substantial limited of knowledge on prevention and treatment as a findings in this study need a health care provider to educate more on the community to ensure that not only pelvic floor exercise can help but other factors that contributed to the urinary incontinence should be manageable such as constipation and life threatenng medication. In contrast with Youngmi (2009) study, reported Korean women tend to believe surgery is the best treatment for urinary incontinence compare to pelvic floor exercise, it is because the result from pelvic floor exercise is unsatisfactory due to their lifestyle.

5. CONCLUSION

A better and more comprehensive understanding urinary incontinence specifically in term of risk factors, impacts, preventive measures, and its management are needed to enhance knowledge. By

using a pamphlet and tutorial video, it may help in increasing the level of knowledge about these conditions and the benefits of Kegel exercise for urinary incontinence.

The innovation proceeds with creating a draft for pamphlet and video recording which are the product. Information and photos selections are elaborately discussed before the pamphlet is finalized. The pamphlet has been meticulously undergone rigorous process of discussion. There is a total of two version of pamphlet before final editing has been made. Editing is basically regarding photo selection, simplifying the description and pamphlet layout. All two versions of the pamphlet are as in figure 6 and 7.



Figure 6. Draft pamphlet



Figure 7. Final pamphlet

As the pamphlet ready, tutorial video on Kegel exercise was recorded and edited. A thorough discussion has been made before finalizing the tutorial video to the public. The screenshot of tutorial video is in figure 8 as well as QR code (figure 9) for tutorial video.



Figure 8. Screenshot of tutorial video on Kegel Exercise



Figure 9. QR code for tutorial video on Kegel Exercise

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