

Knowledge of continent women on physiotherapy as a treatment of urinary incontinence

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Abstract

Objective: *To identify the knowledge about physiotherapy as a treatment of urinary incontinence in continent women.*

Methods: *The study was characterized by a cross-sectional and quantitative study. A ten items questionnaire, created by the researchers, was used with related questions about women's health. The sample consisted of 60 continent women, aged between 20-90 years, divided into age groups, accommodating ten participants in each age delimitation as follows: 20-29, 30-39, 40-49, 50-59, 60-69, 70-90.*

Results: *The results showed that 65% of the women did not know about the physiotherapeutic treatment for UI, 28.33% had heard and 6.67% knew about it. The channels of knowledge selected by the volunteers who claimed to know or hear about physiotherapy in the UI were 18.18% media, 31.82% were people known, 45.45% were health professionals, and 4.55% were other unna/med forms. It was also found that women aged between 60 and 90 years have more knowledge on the subject (15%) than those aged 20 to 39 (5%) and 40 to 59 years (0%).*

Conclusion: *It is concluded, therefore, that continent women need more information regarding physical therapy treatment for urinary incontinence. In addition, this awareness should occur in a multidisciplinary way to cover a greater number of women and information providers, in view of the search for treatment early avoid greater complications.*

Keywords: Physiotherapy; Female pelvic floor; Urinary incontinence; Urogenital system

Introduction

All structures are essential in supporting and maintaining the pelvic organs in their physiological positions. The female pelvic floor is divided into three parts: bladder, anteriorly located, urethra, medially to the vagina and rectum, in the posterior region. It consists of support structures, pelvic fascia, pelvic diaphragm and urogenital diaphragm. The musculature is composed mostly of slow-twitch fibers and, to a lesser extent, fast twitch fibers.¹

Pelvic Floor Muscles (PFM) are intended to support the pelvic organs and maintain physiological functions of storage and disposal of bladder and rectum excretory products. The risk of dysfunction of such

muscles as urinary incontinence, fecal incontinence and genital prolapse increases when PFM lose their integrity.²

Urinary incontinence (UI) is defined by the International Continence Society (ICS) as the complaint of involuntary loss of urine, creating a social and hygienic problem.^{3,4} There are a few types: Effort Urinary Incontinence (EUI) is the loss of urine in sync with some kind of exertion, exercise, sneezing, or coughing. Urinary Incontinence of Urgency (UIU), where urinary loss arises from an intense urge to urinate, in which there is simultaneous contraction of the detrusor, which may be due to detrusor muscle hyperactivity or hypersensitivity. Mixed Urinary Incontinence (MUI), which is a combination of stress incontinence and urgency, among others.^{5,6}

We may cite some risk factors that are associated with UI, such as age. Elderly women are considerably affected by UI as of menopause. Obesity also influences the development of UI, parity and type of parturition may favor UI.⁷

Treatment of UI can be surgical or conservative, such as physiotherapy, behavioral therapy and medication therapy.⁸ The International Continence Society in 2005 recommended physiotherapy as cutting edge treatment for UI, but in Brazil few public services have the care and information appropriate to incontinent women. Physiotherapeutic treatment refers to the strengthening and re-education of the pelvic floor musculature through resources such as kinesiotherapy, electrostimulation, vaginal cones and hipopressive gymnastics.^{8,9}

Physiotherapy aims to improve muscle contraction strength, promote a lumbopelvic static rearrangement and re-educate the abdominal muscles through exercises, devices and techniques, in order to strengthen the muscles needed to maintain urinary continence.^{4,10}

Pelvic floor exercises are well studied in the treatment of pelvic dysfunctions and may provide modifications in morphological variables such as changes in trophism, muscle volume and length, as well as altering functional variables, such as changes in electromyographic activity, muscular strength and resistance.¹¹

Transvaginal electrostimulation is an application of electric current through a probe placed in the vagina to directly stimulate the pelvic floor muscles to contract and relax, helping to strengthen the muscles. It may also help to control voiding urgency when using electrodes in the sacral or tibial region with action on the nerves and decreasing the irritability of the bladder.¹²

Hipopressive Gymnastics is also a physiotherapy's feature and aims to elevate both the abdominal organs and the pelvic floor muscles (PFM), and its difference in relation to other exercises with the same objective is that it does not require the patient to master the PFM. It is made by the combination of exercises of the abdominal musculature, PFM and pectoral, being realized in three phases: slow and deep diaphragmatic inspiration; complete expiration and diaphragmatic aspiration.¹³

The present study aimed to investigate if continents women have knowledge about the physiotherapeutic treatment for urinary incontinence, as well as to identify the channels of knowledge about the subject and to evaluate if the factors age and schooling interfere in the knowledge about the subject.

Methods

This project was approved by the Ethics and Research Committee of UniCEUB, with CAAE-65443817.7.0000.0023. The research is characterized by a cross-sectional and quantitative study. The researchers created a questionnaire (Appendix A) composed of ten questions with the objective of investigating the knowledge of continent women about the physiotherapeutic treatment in urinary incontinence. Continent women were included in the study, with ages from 20 to 90 years old, divided into six groups. Ten participants were included in each age range as follows: 20-29, 30-39, 40-49, 50-59, 60-69 and 70-90. For the volunteers aged 60 and over, the Mini Mental State Examination (MMSE) (Annex B) was applied to evaluate the cognitive function of these elderly women, since, if they were compromised, they would be excluded from the study, being considered a minimum score of smaller than or equal to 24 points.

Pens, drawing boards, and the FICF (Free and Informed Consent Form) were provided with the questionnaire. The response time was free, rotating around 5 to 8 minutes, with no interference from the examiner. After the participant answered the questionnaire, she received an educational folder (Appendix B) which presents concepts related to urinary incontinence and illustrations of the female genital region. The folder also shows a design of the bladder filling and emptying process, and the Clinic School of UniCEUB, the Community Care Center, where there are professionals trained to treat, inform and / or prevent urinary incontinence, as well as other comorbidities that can affect the female genital system. Therefore, if future treatment is necessary, the volunteer will be properly targeted.

The questionnaire was applied in a period of one month in the streets of the Southern Commercial Sector. The exclusion criteria were: women who presented of urinary loss in the last month and elderly women without preserved cognition. Data were tabulated in the statistical program SPSS version 18.0 and analyzed using descriptive statistics resources (mean, median and standard deviation).

Results

The present study was composed by a 60 women sample, with a mean age of 50.02 years, being adjusted in six groups according to the age group, with ten volunteers in each group. Nine participants were excluded from the study, from which: three had a history of urinary loss in the last month and six that exceeded the pre-established number of ten women in each age group.

Figure 1 shows the knowledge classification of the volunteers, in percentages, where it can be observed that 65% of the participants do not know the physiotherapeutic treatment for urinary incontinence. Women who reported to cognize (6.67%) or heard about (28.33%) accounted for 35%, a low percentage when compared to volunteers who did not know the physiotherapeutic treatment for UI.

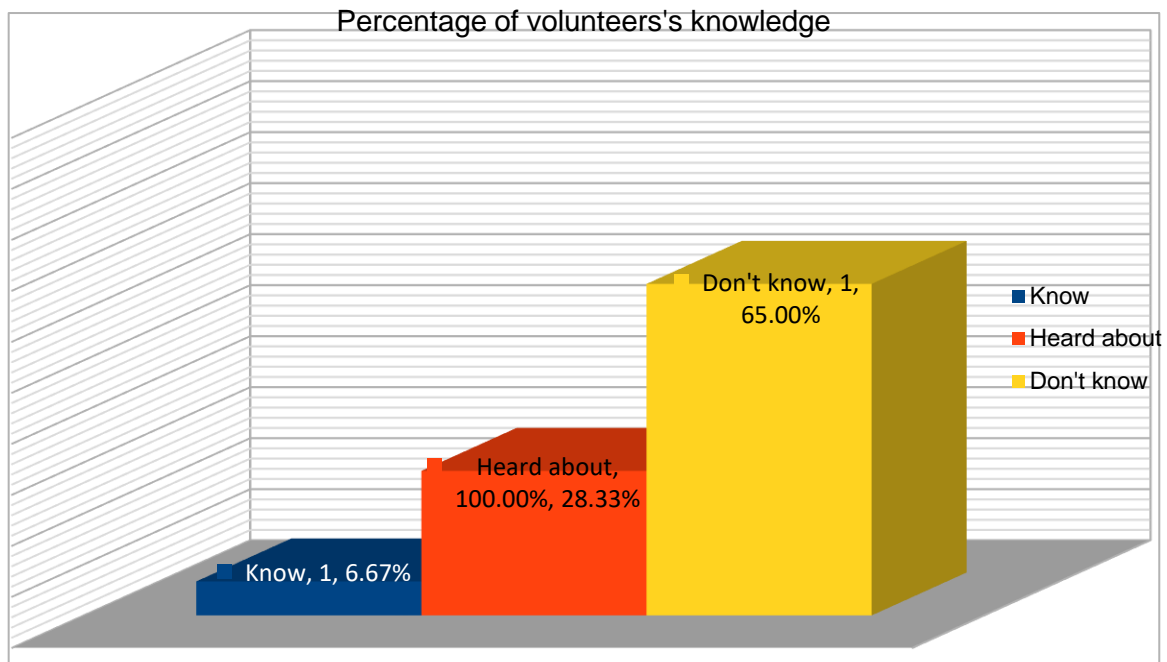


Figure 1. Percentage of knowledge of volunteers

Figure 2 shows absolute values for the "Know", "Heard about" and "Don't know" ranks for the groups aged 20-39 years, 40-59 years and 60-90 years. In this model, some groups were joined, where it was possible to indicate that women aged between 60 and 90 years have a tendency to know more about the physiotherapeutic treatment for UI than women framed in the age groups of 20 to 39 and 40 to 59 years old. This is an important fact that makes us consider that these participants frequently care about their health and seek more knowledge about related topics.

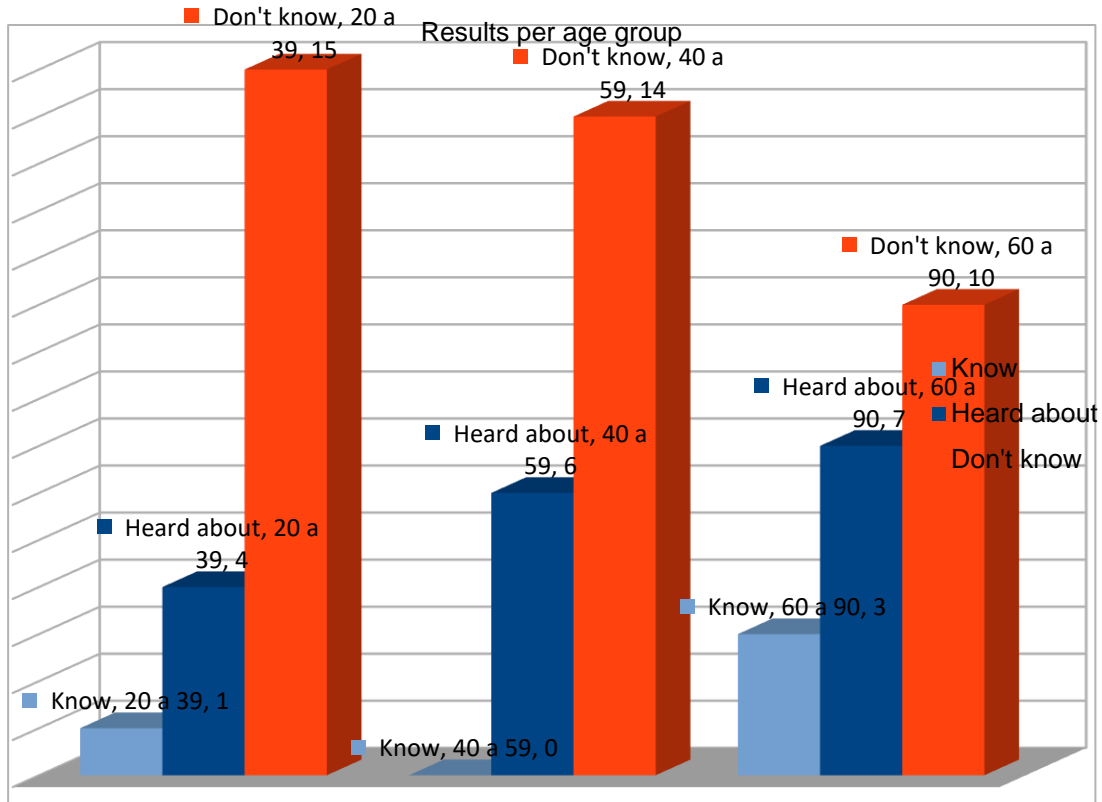


Figure 2. Results by age group

Figure 3 shows, in percentages, the knowledge channels most accessed by the volunteers. The best way to acquire understanding about this subject was through health professionals - 45.45% of respondents say that they have been instructed by these specialists.

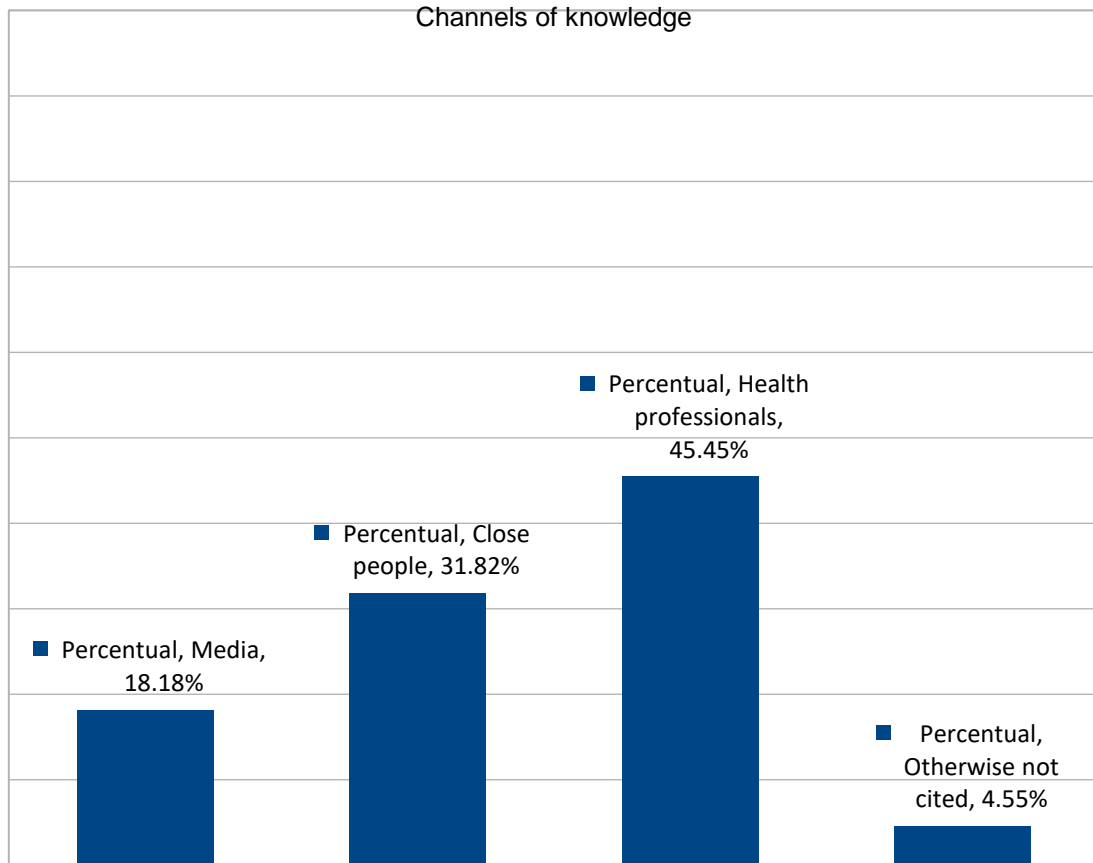


Figure 3. Knowledge channels about treatment

Figure 4 "Schooling degree vs knowledge" indicates the knowledge degree about the physiotherapeutic treatment for each level of schooling. It is concluded that women with incomplete higher education have more knowledge (2) than complete higher education women, since only one volunteer claims to know the physiotherapeutic treatment for UI. In relation to the lack of knowledge about the subject, the group of participants with complete higher education presented the highest value (15) when compared to the other groups - incomplete upper (4), high school (13), elementary school (6) and without schooling (1).

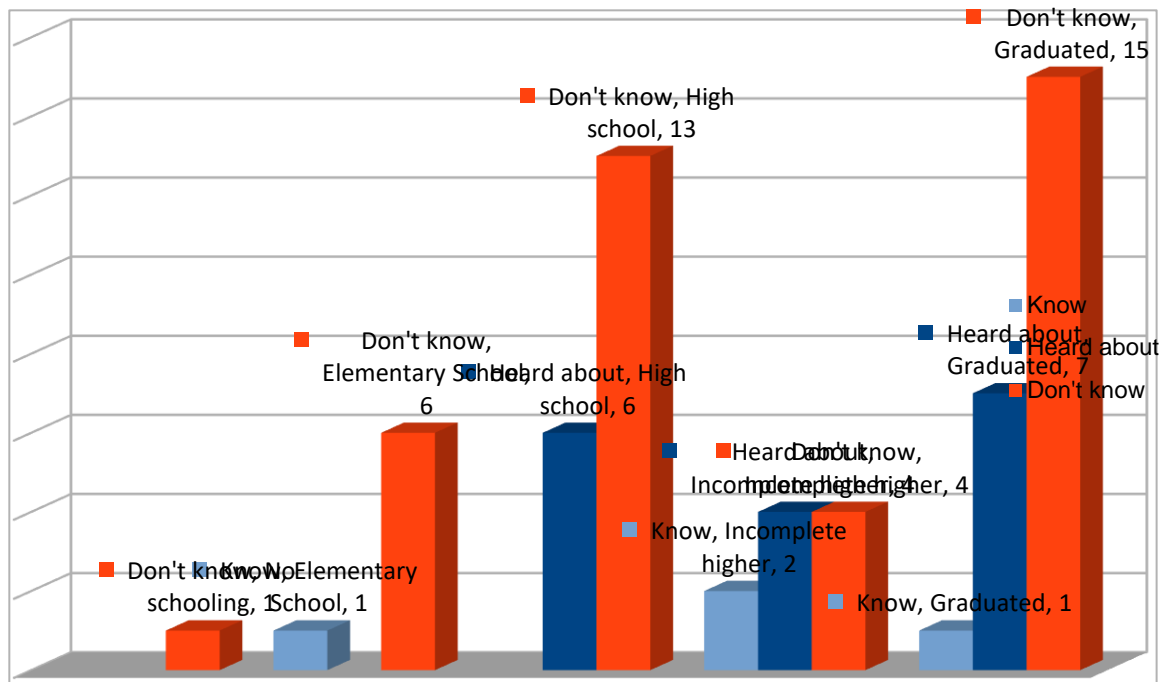


Figure 4. Schooling degree vs knowledge

Table 1 objectively demonstrates the absolute amount of results on the knowledge of physical therapy in UI in each age group. It is observed that the highest values are in the column "Don't know", which leads us to conclude that there is disinformation in all ages, being higher in the age group from 30 to 39 years (8), and lower in the 60 from 69 years (5) and 70 to 90 years (5). In the "Heard about" column, women aged between 60 and 69 years had the highest number among the age groups (4). Two participants aged 70 to 90 years stated that they knew about the subject, leading us to conclude that older volunteers are more knowledgeable about subjects related to the female urogenital system.

Table 1. Absolute values for knowledge degree by age group

Age group	Know	Heard about	Don't know
20 a 29	1	2	7
30 a 39	0	2	8
40 a 49	0	3	7
50 a 59	0	3	7
60 a 69	1	4	5
70 a 90	2	3	5
Total	4	17	39

Figure 5 presents the mean, median and standard deviation calculations for the "Know", "Heard about" and "Don't know" classifications, considering all age groups. The calculations confirm the results

presented previously, that is, the number of women who do not know the physiotherapy for UI in all age groups is greater than that of women who have heard or know about it.

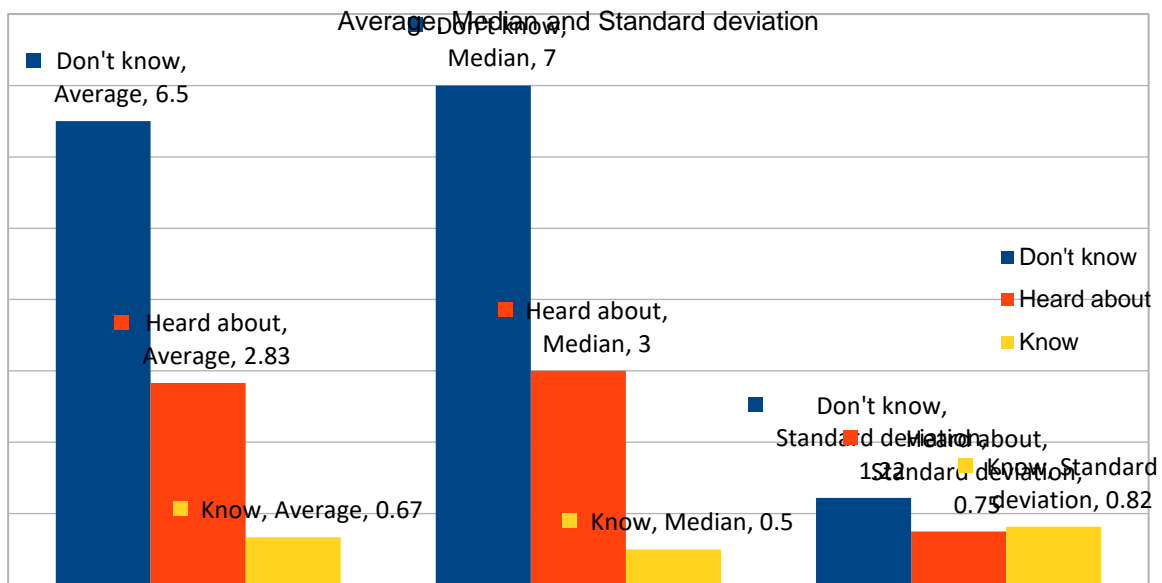


Figure 6. Averages, medians and standard deviations for each knowledge "degree"

Discussion

In agreement with this study, Henkes et al.¹⁴ affirms that many women did not know any form of treatment or were only aware of the surgical procedure for UI. Costa's¹⁵ study corroborates with the statistical data, as of the women studied in their study 17% are aware of the physiotherapeutic treatment and 83% do not know it.

Alves et al.¹⁶ in their study, observes that when the subjects' age and the knowledge about the subject were analyzed, individuals between 50 and 59 years old showed more clarification on the subject when compared with the older ones.

Corroborating this result, Carneiro et al.¹⁷ state that education about anatomy and disorders pelvic floor remains restricted to professionals and students of courses related to health. Poersch and Rosa¹⁸ describe in their study that, in relation to the information place, 87.5% of the participants reported having obtained information from health posts, hospital or through their doctor, which also justifies the high percentage found in the present study.

In Carrara's et al.¹⁹ study, the level of schooling seems to interfere with the knowledge about physiotherapeutic treatment, as the percentage of women with illiterate and primary education was low. This is consistent with the results of the present study, as the number of women with no schooling, elementary and middle school education is lower than the number of women with incomplete and complete higher education.

Carneiro et al.¹⁷ confirm this result when affirming that there is a need to guide the population about the pelvic floor's anatomy, as well as the resources of physiotherapy for the treatment and prevention

of related disorders, leading to more information about urinary dysfunctions and pelvic disorders, and forms of intervention as conservative, behavioral and surgical treatments.

According to Souza et al.,²⁰ elderly women are more likely to suffer from UI due to several factors related to the pelvic floor, lack of detrusor's contractility or decreased urethral compliance. This may justify the data of this study, as they are more likely to develop urinary incontinence and because they live with people of the same age group who present the problem, they seek knowledge about it or are more interested in the subject.

Reinforcing the results of this study, Alves et al.¹⁶ report that the studied population shows misinformation about the subject, where 38.3% of people do not know if physical therapy could be an effective treatment for UI. This leads to a reflection on the need to implement awareness policies, as well as the promotion of population's health in relation to physiotherapy as a form of treatment for urinary incontinence.

Conclusion

With the accomplishment of this study, it was possible to identify the high index of disinformation in relation to the physiotherapeutic intervention as a form of treatment for urinary incontinence, being it a health public problem which, in most cases, is treatable with conduits that soften and/or cure the presented symptoms. Urogynecological physiotherapy plays a fundamental role in the rehabilitation process of the pelvic floor muscles, with the use of kinesiotherapy, electrostimulation, adequate guidelines and other relevant procedures from physiotherapist. It is concluded, therefore, that the continent women need more information regarding to physiotherapeutic treatment for urinary incontinence. This awareness must take place in a multidisciplinary way to reach a larger number of women and provide the right information, because it is expected that women with prior knowledge seek early treatment, thereby reducing complications.

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APPENDIX A. Questionnaire on Urinary Incontinence

1. Name: _____

2. Age: _____

3. Weight: _____

4. Height: _____

5. Education:

- WITHOUT SCHOOLING
- ELEMENTARY SCHOOL
- HIGH SCHOOL
- COMPLETE HIGHER EDUCATION
- INCOMPLETE HIGHER EDUCATION

6. Ever pregnant? YES NO

7. Number of child-births:

- 1 NORMAL CHILD-BIRTH 2 OR MORE NORMAL CHILD-BIRTHS
- 1 CESAREAN DELIVERY 2 OR MORE CESAREAN DELIVERIES
- 1 ABORTION 2 OR MORE ABORTIONS
- NOT APPLICABLE

8. Do you know or have you heard about the physiotherapeutic treatment for Urinary Incontinence?

- KNOW HEARD ABOUT DON'T KNOW

9. Where did the knowledge about physical therapy treatment come from?

- MEDIA (EX: TV, INTERNET, ETC)
- CLOSE PEOPLE
- THROUGH HEALTH PROFESSIONALS
- OTHERWISE NOT CITED
- DO NOT KNOW

10. Have you presented urinary loss in the last month?

- YES NO

APPENDIX B. EDUCATIONAL FOLDER

A anatomia do seu períneo

O que é Incontinência Urinária?
A incontinência urinária é determinada pela perda involuntária de urina, que causa problema social, higiênico e psicológico para mulher.
É causada por diversos fatores: fraqueza dos músculos do assoalho pélvico, problemas neurológicos, entre outros, o que irá comprometer sua qualidade de vida.

É comum ter Incontinência Urinária (IU)?

A incidência é grande: 1 em cada 4 mulheres na faixa de 30 a 59 anos experimentam pelo menos um episódio de perda de urina ao longo da vida.
A incontinência urinária tende a piorar com a idade e pode alcançar até 50% das mulheres acima de 65 anos.
Dentre os tipos mais comuns de perda de urina pode-se citar a Incontinência Urinária de esforço (IUE), Incontinência Urinária de Urgência e Incontinência Urinária Mista (IUM).

Como tratar a Incontinência Urinária?

Pode ser tratada clinicamente com medicamentos, cirurgia, tratamento comportamental e fisioterapêutico.

Métodos de tratamento

CLÍNICO

Em casos selecionados de incontinência urinária, o uso de drogas como tolterodina, oxibutinina e estrogênio tem produzido benefícios às pacientes, preferencialmente associados à fisioterapia do assoalho pélvico.

FISIOTERAPÊUTICO

CINESIOTERAPIA: É realizada através de exercícios diversos feitos com o objetivo de fortalecer a musculatura perineal, além de promover uma melhor consciência corporal. Os exercícios usados são de fácil aprendizado e poderão ser realizados em qualquer local durante o dia.
ELETROESTIMULAÇÃO TRANSVAGINAL: É uma técnica usada para conscientização e ativação da musculatura do assoalho pélvico através de uma corrente confortável.


Ajuda?

O UNICEUB possui um serviço de atendimento fisioterapêutico para área Uroginecológica que fica localizado no Setor Comercial Sul, SCS- QUADRA 1 CONJ. A – 8º ANDAR, EDIFÍCIO UNIÃO, BRASÍLIA-DF.

TELEFONE
3966-1684

ANNEX B. Mini Mental State Examination (MMSE)



Orientação temporal (5 pontos)	Qual a hora aproximada?
	Em que dia da semana estamos?
	Que dia do mês é hoje?
	Em que mês estamos?
	Em que ano estamos?
Orientação espacial (5 pontos)	Em que local estamos?
	Que local é este aqui?
	Em que bairro nós estamos ou qual é o endereço daqui?
	Em que cidade nós estamos?
	Em que estado nós estamos?
Registro (3 pontos)	Repetir: CARRO, VASO, TIJOLO
Atenção e cálculo (5 pontos)	Subtrair: $100-7 = 93-7 = 86-7 = 79-7 = 72-7 = 65$
Memória de evocação (3 pontos)	Quais os três objetos perguntados anteriormente?
Nomear 2 objetos (2 pontos)	Relógio e caneta
REPETIR (1 ponto)	“Nem aqui, nem ali, nem lá”
Comando de estágios (3 pontos)	Apanhe esta folha de papel com a mão direita, dobre-a ao meio e coloque-a no chão
Escrever uma frase completa (1 ponto)	Escrever uma frase que tenha sentido
Ler e executar (1 ponto)	Feche seus olhos
Copiar diagrama (1 ponto)	Copiar dois pentágonos com interseção 

Fonte: Brucki SMD, Nitrini R, Caramelli P, Bertolucci PHF, Okamoto IH. Sugestões para o uso do mini-exame do estado mental no Brasil. Arq Neuropsiquiatr. 2003; 61(3B):777-81.