

Creation and validation of an educational booklet on fundamental pelvic exercises for women with urinary incontinence

Construção e validação de cartilha educativa sobre exercícios pélvicos fundamentais para mulheres com incontinência urinária

Construcción y validación de un folleto educativo sobre ejercicios pélvicos esenciales a mujeres con incontinencia urinaria

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ABSTRACT | Female urinary incontinence is a multifactorial condition characterized by involuntary urinary loss. For its control, strengthening the pelvic floor muscles is necessary. Thus, the guidance provided through available educational material is an essential tool to facilitate the dissemination of knowledge and acceptance by the population. The study aims to create and to validate an educational booklet on fundamental pelvic exercises for women with urinary incontinence. This is a methodological study that was submitted to six expert evaluators in the area, for the content validity of the material using the Content Validity Index (CVI). Afterward, for validation with the target population, the booklet was applied to 30-women users of the Brazilian Unified Health System (SUS) and who underwent gynecological monitoring in health units. The CVI of the educational booklet ranged from 0.71 to 1.00. The evaluators made observations regarding the appearance and content of the booklet, which were accepted for the final version. In the pretest, women understood the images and the text, 83.3% of them judged the cover as attractive and all women agreed that the sequence, organizational structure, and understanding of the sentences were adequate. The illustrations were easy to understand and 100% agreed that the necessary subjects were fully addressed and the majority (96.6%) were motivated to read. The elaborated instrument proved to be effective for its use, because it meets the reality and the health need.

Keywords | Urinary Incontinence; Validation Studies; Health Education; Teaching Material.

RESUMO | A incontinência urinária feminina é uma multifatorial caracterizada condição pela perda involuntária de urina. Para seu manejo, é necessário o fortalecimento da musculatura do assoalho pélvico. Logo, a orientação por meio de material educativo disponível é uma ferramenta essencial para facilitar a transmissão do conteúdo e a adesão da população. Assim, o objetivo do trabalho foi desenvolver e validar uma cartilha educativa sobre exercícios pélvicos fundamentais para mulheres com incontinência urinária. Estudo metodológico, submetido a seis avaliadores experts na área, para a validade de conteúdo do material com o uso do Índice de Validade de Conteúdo (IVC). Posteriormente foi aplicado em 30 mulheres usuárias do Sistema Único de Saúde (SUS) e que realizavam acompanhamento ginecológico nas unidades de saúde para validação com a populaçãoalvo. O estudo foi aprovado pelo Comitê de Ética em Pesquisa local sob o parecer nº 4.099.724. O IVC da cartilha educativa variou de 0,71 a 1,00. Os especialistas fizeram observações referentes à aparência e ao conteúdo do material, as quais foram acatadas para a versão final. No pré-teste, as mulheres entenderam as imagens e o texto, 83,3% julgaram a capa como chamativa e todas concordaram que a sequência, a estrutura organizacional e a construção das frases estavam adequadas. As ilustrações foram de fácil compreensão e 100% afirmaram que foram totalmente abordados os assuntos necessários; a grande maioria (96,6%) relatou motivação para leitura.

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A cartilha confeccionada mostrou-se adequada para orientação de mulheres com incontinência urinária, pelo seu conteúdo coerente com a realidade e com a necessidade de saúde.

Descritores | Incontinência Urinária; Estudos de Validação. Educação em Saúde. Material de Ensino.

RESUMEN | La incontinencia urinaria femenina es una afección multifactorial caracterizada por la pérdida involuntaria de orina. Para su tratamiento, es necesario fortalecer los músculos del suelo pélvico. Para ello, la orientación mediante material educativo disponible es una herramienta fundamental para facilitar la transmisión de contenidos y la adherencia de la población al tratamiento. Ante esto, el objetivo de este trabajo fue desarrollar y validar un folleto educativo sobre ejercicios pélvicos esenciales a las mujeres con incontinencia urinaria. Este es un estudio metodológico, presentado a seis expertos en el área, para la validez de contenido del material utilizando el Índice de Validez de Contenido (IVC). Posteriormente, para validarlo se aplicó a 30

usuarias del Sistema Único de Salud (SUS) que se encontraban en seguimiento ginecológico en las unidades de salud. El estudio fue aprobado por el Comité de Ética en Investigación local bajo la opinión n.º 4.099.724. El IVC del folleto educativo osciló entre 0,71 y 1,00. Los expertos formularon observaciones sobre el aspecto y los contenidos del material, los cuales fueron aceptados para la versión final. En el pretest, las mujeres entendieron las imágenes y el texto, el 83,3% juzgaron llamativa la portada y todas coincidieron en que la secuencia, la estructura organizativa y la construcción de las frases estaban adecuadas. Las ilustraciones fueron fáciles de entender en el folleto, que abarcó el 100% de los temas esenciales; y la mayor parte (96,6%) de ellas reportaron motivación para leerlo. El folleto elaborado resultó ser adecuado para orientar a las mujeres con incontinencia urinaria, por sus contenidos acordes con la realidad y la necesidad de salud de esta población.

Palabras clave | Incontinencia Urinaria; Estudios de Validación; Educación en Salud: Material de Enseñanza.

INTRODUCTION

The International Continence Society (ICS) defines that any involuntary urinary loss determines a condition of urinary incontinence (UI)¹. It can be classified into three subtypes: stress urinary incontinence (SUI), in which urinary loss occurs due to physical exertion such as coughing; urgency urinary incontinence (UUI), in which urinary loss is in conjunction with the urge to urinate; and mixed urinary incontinence (MUI), in which both situations occur².

It is estimated that 200 million people are affected with UI, regardless of gender, and that the prevalence rate in women is 69%, confirming a relationship of occurrence of two women to one man. According to the estimate, more than 50% of women who complain about the problem do not seek medical assistance³. The unawareness about the pathology and its treatment has pointed out a serious public health problem¹.

UI is a frequent multifactorial condition that affects many women, leading them to discomfort and embarrassment, negatively affecting their quality of life. We observe the importance of knowing and promoting early treatment in order to prevent changes and improve quality of life (QOL)².

When women report complaints of pelvic floor dysfunctions, they seek primary health care (PHC) of the Brazilian Unified Health System (SUS), the first healthcare

level for the population⁴, as their gateway. In these facilities occur the prevention of this disease and the possible minimization with the help of trained professionals, where the basis of public health priority takes place⁴.

Among PHC professionals, the physical therapist who works in women's health is qualified to perform interventions in the prevention of pathologies and treatment of injuries, besides being an educator and health promoter. One of the actions that stand out in the sphere of an educator, when addressing women with urinary dysfunctions, concerns the guidelines and kinetic functional approaches, in order to avoid a poor prognosis concerning QoL, coming from the physical, psychological, and emotional dimension ^{5,6}.

Concerning this primary care background, educational materials, such as manuals, pamphlets, leaflets, booklets, and primers, are an important tool for health education. Generally, they assist in the treatment and prevention of injuries, being an effective and low-cost tool for the maintenance of therapeutic approaches. Moreover, they can cover a large number of people and develop in individuals a sense of responsibility and autonomy and are viable alternatives for information, population awareness, and self-care promotion^{7,3,8}.

Thus, this study aims to create and to validate an educational booklet on pelvic exercises for women suffering urinary losses.

METHODOLOGY

This is a methodological study, which stands out for being investigative, organizational, and analytical in order to create, to validate and to evaluate instruments⁹. It was divided into two stages: educational booklet creation and content validation; and pretest.

In the first stage, considering our subject, a literature survey both in English and Spanish was carried out in five databases: *Literatura Latino-Americana e do Caribe em Ciências Sociais e da Saúde* (LILACS), Scientific Electronic Library Online (Scielo), Virtual Health Library (BVS), Physiotherapy Evidence Database (PEDro), and US National Library of Medicine (Pubmed). The following keywords were used: urinary incontinence; validation studies; health education; and teaching material.

Then, the educational booklet was developed according to the guidelines on the design and effectiveness of teaching materials, considering content, language, organization, design, drawings, learning, and motivation¹⁰.

Kegel exercises were used as a theoretical framework for conservative treatment, because in the 1950s, Arnold Kegel, a gynecologist, was a pioneer in introducing the training of female's pelvic floor muscles to treat urinary incontinence in this population³.

After the creation of the booklet, content validation was performed by experts on the subject, who evaluated the appearance, scope, relevance, and clarity of the items and agreement among them⁹. Content validity is a significant step for the creation of educational materials or adaptations of measures and is the resource by which the instrument will accomplish the desired purpose. The scope indicates if the domain and/or concept was adequately maintained by the items and if the dimensions were considered. The relevance indicates if there is a relationship between the items and their concepts to achieve the established objectives. Finally, clarity is the resource by which the material will be made understandable and through it, the booklet will express its function/purpose^{9,11}.

The variables of the educational booklet analyzed were: language-relevance, language-scope, language-clarity, layout-relevance, layout-clarity, illustration-relevance, and illustration-clarity. The relevance is related to the concepts of the questions to know if they reflect the concepts involved, they are relevant to the situation and appropriate to the proposed objective; clarity concerns the wording of the items, if they appropriately express what one wishes to measure and if the desired concept

is understandable; and the scope refers to the sufficient information to achieve the objective of each topic¹².

A committee composed of six evaluators from three professional categories was chosen – stomal therapy nurse, urogynecologist-functional physical therapist, and women's health physical therapist – according to the criteria for the number of evaluator¹³. They were invited by e-mail and received the instrument. A specific questionnaire to perform the evaluation was sent to each one.

The evaluators assessed the booklet via a six-item trial protocol; also, the analysis had the agreement and relevance of each item. The data were encoded and verified in the Excel software and we used the content validity index (CVI) for content validation, a method that uses a score scale ranging from 0 to 4 according to the evaluators' answers: 1 (irrelevant), 2 (not very relevant), 3 (really relevant), and 4 (very relevant)⁹.

Items that received scores 1 or 2 were reviewed or eliminated. To calculate the CVI, the following equation was used: [CVI: number of answers "3" or "4" / total number of answers]. The CVI greater than or equal to 0.80 was considered acceptable.

Due to the need to establish parameters for the selection of evaluators, we selected the professionals based on the following criteria: theses or dissertations in the health sciences; scientific articles on the subject; participation in research groups and examining board; teaching in the UI area; and practical performance^{14,15}.

The second stage was the pretest, involving the target population, with the instrument in the final version after the evaluators' suggestion, in order to verify the clarity, understanding, and relevance of the content that the educational booklet offered. The questions addressed the cover, layout, understanding of sentences, illustrations, and motivation to read.

The sample had the participation of the female population and users of the SUS of two Estratégia de Saúde da Família (ESF) units of a municipality in a town of the state of São Paulo, constituting a total of 30 women. The inclusion criteria were: women over 18 years of age, literate, users of the SUS, and who performed gynecological follow-up in these units. The exclusion criteria were consisted of: women who were in the gestation period, who were taking some medication for UI, and who had some history of surgery for UI treatment purposes.

Data were collected by the researcher from September 30 to October 30, 2020, after authorization from the site

administration. The approaches occurred in a private environment in the health unit, in accordance with the Resolution No. 466/2012. Health safety measures were adopted to protect participants and researchers during the pandemic. All the participants signed the informed consent form (ICU).

RESULTS

The first stage was consisted of the elaboration and validation of the content of the instrument. The creation process was based on the consultation of national and international literature regarding the main aspects to be evaluated among women with UI.

The composition of the evaluators was six specialists in the area of physical therapy training of women's health: one, which works both in the area of physical therapy of women's health and in the nursing stomal therapy, and two in the area of stomal therapy nursing. The majority were female (83%), with a mean age of 42

years, doctors, with current occupation in outpatient clinics and higher education institutions; the average training time was 16.6 years.

Regarding the suggestions, the evaluators highlighted items related to the design of images, texts, and composition. Thus, this resulted in a booklet with 24 pages, 14 illustrations with flat colors with high saturation, and composed of simple shapes for easy reading, in booklet format with two staples in the middle.

The CVI of the educational booklet ranged from 0.71 to 1.00 (Table 1).

After the preparation of the final version of the booklet, the material was submitted to the pretest, in which women in gynecological follow-up in the health units participated. We found that the majority were in the age group of 30 to 49 years (mean of 42.5 years, standard deviation 8.9), with complete high school education (36.6%), two children (43.3%), history of cesarean delivery (60%), body mass index between 25.0 and 29.9 (43.3%), without constipation (70%), without smoking habits (100%) and with caffeine consumption (93.3%).

Chart 1. Synthesis of qualitative analysis of the changes suggested by the research evaluators related to the UI manual

Original	Suggestion of the evaluators	Decision
Cover with the title Exercícios pélvicos fundamentais para mulheres com incontinência urinária (Pelvic exercises for women with urinary incontinence)	Swap the cover image for an image showing a pelvis. Change the title to <i>Exercícios para o assoalho pélvico: prevenção e tratamento da incontinência urinária</i> (Pelvic floor exercises: prevention and treatment of urinary incontinence).	Title - Pelvic floor exercises: prevention and treatment for women with urinary incontinence.
Presentation of the booklet	Place a picture representing a woman with UI.	Replaced the figure representing a woman with UI.
UI definition: "Urinary incontinence is a loss of urine involuntarily, that is, the person cannot control the pee and ends up leaking against one's will."	Add the description of the International Continence Society.	The description of the International Continence Society was added.
Risk Factors. "Some habits or characteristics make us easier to have urinary incontinence."	"Urinary incontinence can occur due to different causes," in addition to correcting the alignment/ spacing of the page.	"Urinary incontinence can occur due to different causes," in addition to correcting the alignment/ spacing of the page.
	Add a page to display the three types of UI.	A page to display the three types of UI was added.
On the page on the explanation of the SUI: "It is the one that occurs the loss of pee when one makes some exertion such as coughing, sneezing and lifting heavy objects."	Replace it with "It is the one that occurs the loss of pee when we make some exertion such as coughing, sneezing and lifting heavy objects."	Replace it with "It is the one that occurs the loss of pee when we make some exertion such as coughing, sneezing and lifting heavy objects."
On the page on the explanation of the UUI: "Urgency Urinary Incontinence is a sudden and strong desire to pee."	Replace it with "It is the involuntary loss of urine preceded by a strong desire to urinate." Replace it the illustration with a more representative one.	Replace it with "It is the involuntary loss of urine preceded by a strong desire to urinate." The illustration with a more representative one was replaced.
On the MUI explanation page: "When the two previous situations occur."	Replace it with "is the involuntary loss of urine when one makes some exertion and preceded by a strong desire to urinate." Replace it the illustration with a more representative one.	Replace it with "is the involuntary loss of urine when we make some exertion and preceded by a strong desire to urinate." The illustration with a more representative one was replaced.
In the section on UI consequence: "the consequences are many."	Replace it with "The effects of urinary incontinence on women's lives are many"	Replace it with "The effects of urinary incontinence on women's lives are many"

(continues)

Chart 1. Continuation

Original	Suggestion of the evaluators	Decision
On the explanation page about the pelvic floor: "Let's know the female	Replace it with "Shall we know the pelvic floor muscles?."	Replace it with "Shall we know the pelvic floor muscles?."
body," "If we put a mirror to see the part of the intimate region of the woman, this is what will be observed."	Replace it with "These muscles are part of the deep muscle layer of the vagina. When we put a mirror to visualize the vagina, we can observe."	Replace it with "These muscles are part of the deep muscle layer of the vagina. When we put a mirror to visualize the vagina, we can observe."
On the second page, which explains the pelvic floor: "Let's get to know the female body." "On the inside".	Replace it with "Shall we know the pelvic floor muscles?." Replace it with "At the bottom" Request explanation of the intestines, uterus, and bladder function.	Replace it with "Shall we know the pelvic floor muscles?." Replaced it with "At the bottom" The explanation on the intestines, uterus, and bladder function was added.
On the first page, which explains the exercises that can be performed.	Replace it with "To improve the problem of urinary loss, there are exercises to strengthen the pelvic floor muscles that can be performed daily." Replace it with "During the expiration try to contract the muscles around the anus as if you were holding the poop; also contract the musculature as if you were holding the pee, keep the contraction for 6 to 10 seconds; rest for 10 seconds, and perform 8 to 12 contractions at time."	Replace it with "To improve the problem of urinary loss, there are exercises to strengthen the pelvic floor muscles that can be performed daily." Replace it with "During the expiration try to contract the muscles around the anus as if you were holding the poop; also contract the musculature as if you were holding the pee, keep the contraction for 6 to 10 seconds; rest for 10 seconds, and perform 8 to 12 contractions at time."
On the second page, which explains the exercises that can be performed.	Replace it with "Try to perform the contraction of the pelvic floor in other positions." Suggestion for transcription of the exercise steps next to the illustration.	Replace it with "Try to perform the contraction of the pelvic floor in other positions." The exercise steps next to the illustration were transcribed.
On the third page, which explains the exercises that can be performed.	Replace it with "Try this exercise." Suggestion of change of the exercise steps to "With the butt resting on the floor, contract the pelvic floor muscles as if you were holding a fart, raised the hip while still holding the fart for 6 to 10 seconds, return to the starting position and relax for 10 seconds. Perform 8 to 12 contractions at a time. Preferably, three times a day."	Replace it with "Try this exercise." Suggestion of change of the exercise steps to "With the butt resting on the floor, contract the pelvic floor muscles as if you were holding a fart, raised the hip while still holding the fart for 6 to 10 seconds, return to the starting position and relax for 10 seconds. Perform 8 to 12 contractions at a time. Preferably, three times a day."
On the second page, which explains the exercises that can be performed.	Replace it with "Try this exercise." Suggestion of change of the exercise steps to "Using a medium ball between the feet without tightening, contract the pelvic floor muscles as if you were holding a fart, with legs stretched on the ground, lift the legs stretched still doing the contraction. After you get to the height you can, lower your legs, relaxing. Perform 8 to 12 contractions at a time. Preferably, three times a day."	Replace it with "Try this exercise." Suggestion of change of the exercise steps to "Using a medium ball between the feet without tightening, contract the pelvic floor muscles as if you were holding a fart, with legs stretched on the ground, lift the legs stretched still doing the contraction. Lift your legs stretched while still doing the contraction. After you get to the height you can, lower your legs, relaxing. Perform 8 to 12 contractions at a time. Preferably, three times a day."
On the page about habits.	Replace it with "behavioral therapy." Suggestion "We may change some habits to improve urinary incontinence: in addition to the exercises to strengthen pelvic floor muscles, performing behavioral changes in our life routine to treat urine loss symptoms is necessary."	Replaced it with "behavioral therapy." Suggestion "We may change some habits to improve urinary incontinence: in addition to the exercises to strengthen pelvic floor muscles, performing behavioral changes in our life routine to treat the urine loss symptoms is necessary."
On the page about habits.	Replace it with "Attention." Suggestion "This booklet does not replace pelvic floor evaluation, as well as follow-up with specialized health professionals. If you have any complaints of urinary loss, you must seek a health professional for a consultation where they can assess the conditions of your pelvic floor and mediate the strength of this musculature. Whenever you need it, go to the nearest basic health unit to check this and other health conditions."	Replace it with "Attention." Suggestion "This booklet does not replace pelvic floor evaluation, as well as follow-up with specialized health professionals. If you have any complaints of urinary loss, you must seek a health professional for a consultation where they can assess the conditions of your pelvic floor and mediate the strength of this musculature. Whenever you need it, go to the nearest basic health unit to check this and other health conditions."

Table 1. CVI by expert evaluators, SP (2020)

	Relevance Language	Clarity Language	Relevance Language	Illustration Relevance	Illustration Clarity	Layout Relevance	Layout Clarity
Cover and title	0.96	0.88	1.00	0.96	0.88	1.00	1.00
Presentation of the booklet	0.96	1.00	1.00	0.92	0.88	0.96	0.96
Explanation of urinary incontinence	1.00	0.96	0.96	0.83	0.83	0.96	0.96
Explanation of risk factors	0.92	0.83	0.88	0.88	0.92	0.92	0.96
Explanation of types of urinary incontinence - exertion	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Explanation of types of urinary incontinence -urgency	0.92	0.92	0.92	0.88	0.79	1.00	1.00
Explanation of types of urinary incontinence -mixed	0.96	0.92	0.96	0.92	0.88	1.00	1.00
Explanation of the consequences of urinary incontinence for a woman's life	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Knowing the female body - first part	0.92	0.92	0.96	0.88	0.71	0.92	0.88
Knowing the female body - second part	1.00	0.88	1.00	0.96	0.96	0.96	0.96
Exercises to improve the condition	0.88	0.88	0.96	1.00	1.00	0.96	0.92
Exercises in other positions - first part	0.96	0.88	0.96	0.96	0.96	1.00	1.00
Exercises in other positions - second part	0.96	0.88	0.96	0.96	0.96	0.96	0.96
Contraction exercise next to the bridge	0.92	0.96	0.96	0.96	0.92	1.00	0.96
Exercise of contraction with the elevation of lower limbs	0.83	0.92	0.88	0.92	0.88	0.92	0.88
Remember	0.92	0.96	0.92	0.96	0.92	0.96	0.96
Changes in habits	0.92	0.92	0.96	1.00	0.96	1.00	0.96
Remember	0.96	0.92	0.92	1.00	0.96	1.00	0.96

Values expressed in IVC.

The female users answered the questions (Table 2) and affirmed that the cover of the booklet is attractive, with appropriate content sequence and organizational structure, content written clearly, interesting text for reading, constructed sentences, and illustrations of easy understanding. Regarding suggestions, only two women

suggested that the booklet cover had more vibrant and strong colors.

At the end, after all the suggested corrections, the booklet presented 24 pages, with illustrations and text, in primer format with two staples, as shown in Figure 1.

Table 2. Notes from the target population. n=30, SP, (2020)

Questions		
Question 1: Did the cover get your attention?		
Yes	83.3% (25)	
No	16.6% (4)	
I do not know	0.2% (1)	
Question 2: Is the content sequence adequate?	100% (30)	
Yes	100% (30)	
Question 3: Is the structure of the educational booklet organized?		
Yes	100% (30)	
No	0 (0)	
I do not know	0 (0)	
Question 4: The understanding of the sentences are?		
Easy to understand	100% (30)	
Easy to understand	0 (0)	
I do not know	0 (0)	

(continues)

Table 2. Continuation

Questions		
Question 5: The written content is?		
Clear	100% (30)	
Confused	0 (0)	
I do not know	0 (0)	
Question 6: Is the text?		
Interesting	100% (30)	
Interesting	0 (0)	
I do not know	0 (0)	
Question 7: Are the illustrations?		
Easy to understand	100% (30)	
Question 8: Do the illustrations complete the text?		
Yes	100% (30)	
Question 9: Do pages or sections seem organized?		
Yes	96.6% (29)	
No	3.4% (1)	
Question 10: In your opinion, will any IU patient who reads this booklet understand what it's about?		
Yes	100% (30)	
Question 11: Did you feel motivated to read the booklet until the end?		
Yes	96.6% (29)	
No	3.4% (1)	
Question 12: Does the educational material address the issues necessary for patients with UI who perform the exercises?		
Yes	100% (30)	
Question 13: Has the educational booklet suggested you act or think about UI?		
Yes	100% (30)	



Esta é uma cartilha destinada a mulheres com queixa de perda involuntária de urina, também, conhecido como incontinência urinária.

conteúdo demonstra exercícios para os músculos do assoalho pélvico para a prevenção e o tratamento.

FICHA TÉCNICA

Este material foi produzido na residência multiprofissional Saúde da Família e Comunidade da Prefeitura de Sorocaba (SP).

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Figure 1. Educational booklet – final version (continues)

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INCONTINÊNCIA URINÁRIA

A Sociedade Internacional de Continência define que qualquer perda urinária involuntária já determina uma situação de incontinência urinária



INCONTINÊNCIA URINÁRIA DE

FATORES DE RISCO

A Incontinência Urinária pode ocorrer por diferentes causas:

- Excesso de peso corporal
- · Consumo excessivo de cafeína
- Hábito de fumar
- Intestino preso
- Menopausa e Envelhecimento
- Alto peso do recém nascido (≥ 3.500 Kg)
- Anestesia que prolonga o parto vaginal
- · Parto vaginal traumático com lacerações

5

TIPOS DE INCONTINÊNCIA URINÁRIA

ESFORÇO É aquela que ocorre a perda do xixi quando realizamos algum esforco como tossir, espirrar

e levantar objetos pesados.

INCONTINÊNCIA URINÁRIA DE URGÊNCIA

É a perda involuntária de urina precedida de um forte desejo de urinar.







INCONTINÊNCIA URINÁRIA MISTA

É a perda involuntária de urina ao esforço e precedida de um grande desejo de urinar.



Os efeitos da incontinência urinária na vida das mulheres são muitas...



VAMOS CONHECER OS MÚSCULOS DO ASSOALHO PÉLVICO?

Esses músculos fazem parte da camada muscular profunda da vagina.

Quando a gente coloca um espelho para visualizar a vagina nós conseguimos visualizar:

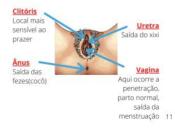


Figure 1. Educational booklet - final version (continues)



Para melhorar o problema de perda urinária existem exercícios para fortalecer os músculos do assoalho pélvico que podem ser realizados diarimente.

- Sente na cadeira de um jeito confortável e com os pés no chão
- Tente contrair os músculos ao redor do ânus, durante a expiração, faça força de segurar cocô contraia também a musculatura como se estivesse segurando o xixi



Tente realizar em outras posições a contração do assoalho pélvico aprendida

Você também pode tentar realizar o exercício aprendido na página anterior em outras posições, como por exemplo:



Tente realizar este exercício:

fracos a mulher começa a ter queixas de perda involuntária de urina



Com o bumbum apoiado no chão contraia os músculos do assoalho pélvico como se tivesse segurando um pum



Eleve o quadril ainda segurando o pum, por 6 a 10 segundos, retorne a posição inicial e relaxe por 10 segundos

Realize de 8 a 12 contrações por vez. Preferencialmente realize 3 vezes ao dia Tente realizar este exercício:



Com uso de uma bola média entre os pé sem apertar, contraia os músculos do assoalho pélvico como se tivesse segurando um pum, com as pernas esticadas no chão.



Levante as pernas esticadas ainda fazendo a contração. Depois que chegar na altura que conseguir, abaixe as pernas, relaxando.

Realize de 8 a 12 contrações por vez. Preferencialmente realize 3 vezes ao dia

LEMBRE-SE

Realizar os exercícios de maneira diária é importante. Para não esquecer de fazê-los pode escrever na agenda, no alarme do celular ou se preferir utilize este planejamento mensal, marcando um "X" nos dias que realizou os exercícios.



DICA: Preencha o quadro a lápis para reaproveitar.

Podemos mudar alguns hábitos para melhorar a incontinência urinária: Além dos exercícios para fortalecimento dos músculos do assoalho pévico é necessário realizar mudanças de comportamentos da nosa rotina de vida para tratar os sintomas de perda de urina.

TERAPIA COMPORTAMENTAL

- Beba água a vontade (não diminua o consumo por conta da incontinência urinária);
- Aumente o consumo de alimentos ricos em fibras;
- Controle o peso corporal;
- Lembre-se de realizar a contração quando for carregar objetos pesados.



ATENÇÃO

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Esta cartilha não substitui a avaliação do assoalho pévico assim como a companhamento com um profissional de saúde especializado. Caso você tenha alguma queixa de perda urinária é importante que você procure um profissional de saúde para uma consulta para que ele possa valiar as condições do seu assoalho pévico e mediar a força dessa musculatura. Sempre que precisar vá até a unidade básica de saúde mais próxima para verificar esta e outras condições de saúde.



BIBLIOGRAFIA

Wrotegy, v. 6.1, n. 1, p. 37-49, 2003.
BARACHO, E. Fisioterapia aplicada à saúde da mulher. 5º Edição. São Pauto: Guanabara.
Roosan. 2012.

BOKRE, K. SJÖSTRÖM, M.SAMUELSSON, E.Seif-management of stress uninary incording there is no few the attenting programmes. Society on pelvic floor muscle training, one bookle and one internet dated. SCANDINAVIAN JOURNAL OF PRIMARY HEALTH CARE, 37, n.3, p. 380-387, 2019.

antiphoto, Laterier education Penil, soon mode electoes (pejonal tre descs), metre (MANUFFOLDE), 2016. Disponiteli emi https://www.uptaduse.com/contents/penilc-floormuscle-exercises-beyond-the-basics. Acesso em: 01/01/2020.

review abridged republication. **Brazillan Journal of Physical Therapy**, v. 23, n.2, p.93-107, 2019.

description of an intervention proposal **Rev Bras Med Esperte** v.25.n.5.p.409.412, 2019. HIGA R., LOPES,M.,REIS, M. Fatores de risco para incontinência urinária na mulher. **Revista**

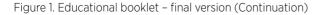
MARTINHO, N.M. et al. The effects of training by virtual reality or gym ball on pelvic floor muscle strength in postmenopausal women: a randomized controlled trial Can Urol Assoc Lv. 4.p. 419-42. 2010

iur4.p.419-424, 2010 (ABOIA, D.M. et al Continence App. Construction and validation of a mobile application for postnatal univary incontinence prevention. **European Journal of Obstetrics & Gynecolo**

SILVA, A. M. N.; OLIVA, L. M. de P. Exercícios de Kegel associados ao uso d cones vaginais no tratamento da incontinência urinária: estudo de caso. Revista Scientia Medica Porto Alegre, v. 21, n. 4, p. 173-176, 2011.



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DISCUSSION

In order to bring innovation and strengthening to PHC, rationally incorporating communication and education technologies are necessary¹⁶. Among them, we highlight the educational materials printed in various formats, contributing to the development of responsibility and autonomy of individuals; they represent viable alternatives for information and awareness of the population¹⁷.

Thus, the first step towards the creation of the educational booklet was the search for specialized literature. The aspects to be evaluated in women with urinary incontinence are many and include life habits and gynecological-obstetric history, in addition to treatment and the way to explain them. This explains the reason why it is advisable to provide educational material with issues that can help women and define important concepts and care, such as the ability to contribute to the prevention of complications of those who have UI, in order to improve therapeutic approaches¹⁸.

In order to protect the information in the booklet and also the creation of it, the multidisciplinarity of the evaluators who participated in its evaluation process is relevant. This reflects the appreciation of opinions and perspectives that teamwork on the thematic area and construction of educational material is a possibility of aligning conducts to patient care with the participation of health professionals¹⁹.

Language directed to educational materials should be clear and simple – ideally, it should be understandable for people aged 10 to 14; layout and illustration should be readable, easy to understand, effective, and culturally relevant 11,18. For example, one of the evaluators requested the replacement of one of the illustrations with a more representative one; another pointed out the need to exchange one of the figures for a better representation of women with UI, in addition to the replacement of the cover image and the insertion of a new title.

The procedure for adapting the educational booklet with the suggestions of the evaluators is an essential step to make it more complete, with scientific and effective rigor in the health education process¹⁸. The (re)elaboration and exclusion of fragments, the substitution of terms, and the conception of the illustrations were suggested.

Thus, after the evaluation of the experts – and even if the CVI was considered adequate, and the suggestions seen as improvements – what was pointed out by them was accepted more clearly. The educational material was reformulated simply, with concise writing, allowing the transmission of accurate information so that readers could present better learning concerning the subject addressed. These alterations made in the booklet provided significant changes aiming at the improvement of the material, according to the perspectives of the evaluators and researchers.

Concerning the figures, which were also reformulated, the literature points out that they should be attractive, with an objective and clear nonverbal communication to arouse the interest of the public and acceptance at the various levels of education¹⁸.

In addition, one of the evaluators suggested modifications regarding the exercise protocol, which were accepted. They meet what the literature advocates, that is, perineal contraction is 8 to 12 times in each exercise session and that, if possible, three times a day for a period of 15 to 20 weeks of training²⁰. Such exercises are also known as perineal and are characterized by being simple to perform, and active participation and motivation of patients are necessary¹¹.

Regarding the contribution of the evaluators to the construction and validation of the educational booklet, the agreement between them in the research was 0.80 for the items. This corroborates another study of the creation of information technology, using a smartphone application targeted to women with UI after childbirth, which obtained CVI greater than 0.809.

On the other hand, a study on the conception and development of educational material for women with UI did not use the CVI tool, but rather an average of the variables (language, illustration, and presentation of information), using a Likert scale and involving only four evaluators for validation³.

The use of the target audience in the process of creation and validation of the educational booklet allows characterizing and identifying who is intended, as well as indicating whether the content of the material meets the established demands²¹.

Regarding the target audience, we verified that in the study of Mourão et al. ²², 48 women attended by a gynecological clinic had the following profile: prevalence of UI in the age group 30 to 48 years, complete high school education, four or more children, without constipation, caffeine consumption and smoking habits. This partially corroborates the data of the present study: incidence of UI in the age group of 30 to 49 years, complete high school education, two children, history of cesarean delivery, BMI between 25.0 and 29.9, without constipation and smoking habits, and with caffeine consumption.

The prevalence of women aged 30-49 years who expressed UI corroborates the data found in the literature since the incidence of the pathology increases with the aging process – the occurrence of UI tends to be lower in young women and young adults²³. Excess body weight with high BMI increases intra-abdominal pressure in daily activities, which results in increased bladder pressure and greater mobility of the urethra, leading to urinary loss²⁴.

During the pretest phase, the population sample of 30 women comprised images and text. Among the participants, 83.3% judged the cover as attractive, all agreed that the sequence, organizational structure, and understanding of the sentences were adequate, that the text was interesting and with clear writing, and that the illustrations were easy to understand and complete the text. Regarding the approach of the necessary issues in the booklet, 100% said that they were fully addressed and that they stimulated reflection; the majority (96.6%) had the motivation to read the material.

Considering the pedagogy concept concerning the inclusion of the individual, the use of booklets as a health technology education evidences the humanist attitude of respect for differences, understanding of singularities, and equity in the opportunity of access to care for all. It is a resource that is clear, timeless, easily accessible and has wide applicability to the intended public, with possible use even at home. In addition, written communication facilitates the education process on the subject, allowing the decoding and assimilation of information using clear language, with examples, which, added to the illustrations, allow the reader/patient to form a critical awareness and also oriented towards a healthier life, with greater autonomy, thus leading to self-care²⁵.

The educational materials in PHC should be used as complementary support, besides being easy to acquire and handle by Users of the SUS²⁶. Thus, they must be offered in educational practices in the health field, however, this cannot be done as a replacement for the communicative and clinical process that needs to exist between health professional and patient. The creation and validation of a booklet for UI in women in the scope of primary care constitute a great incentive for actions aimed at health promotion, as well as rehabilitation and preventive processes in this population³.

The preparation and validation of the educational booklet went through the necessary steps recommended in the literature. This fact allows the elaborated material to be used by different health professionals working with this population, highlighting the importance of guidelines for the promotion and prevention of UI diseases, in addition to treatment.

In the scientific sphere, the booklet can be used among the female population in different aspects, aiming at its applicability, as well as the effectiveness and acceptance by the patients for self-care.

CONCLUSION

We concluded that the educational booklet Exercícios para o assoalho pélvico: prevenção e tratamento da incontinência urinária na mulher (Exercises for the pelvic floor: prevention and treatment of urinary incontinence in women) presented good content validity. After all stages of creation and validation, the instrument proved to be adequate to be used in Primary Health Care for its content consistent with reality and health needs, listing the main aspects to be visualized by the health professional in this evaluation.

REFERENCES

- Abrams P, Cardozo L, Fall M, Griffiths D, Rosier P, Ulmsten U, et al. The standardisation of terminology in lower urinary tract function: report from the sub-committee of the International Continence Society. Urology. 2003;61(1):37-49.
- Baracho E. Fisioterapia aplicada à saúde da mulher. 6th ed. Rio de Janeiro: Guanabara Koogan; 2018.
- Oliveira AHAM, Vasconcellos TB, Macena RHM, Bastos VPD. Cartilha educativa para mulheres sobre incontinência urinária: concepção e desenvolvimento. Rev Baiana Saude Publica. 2017;41(2):308-23.
- Castañeda BI, Martínez TJC, García DJA, Rodríguez AEM, Pérez RNM. Aspectos epidemiológicos de la incontinencia urinaria: revisión bibliográfica. Rev Cub Med Fis Rehab [Internet]. 2016;8(Suppl:1):88-98. [cited 2020 Jan 10]. Available from: https://bit.ly/3zPMnJ9
- Tavares LRC, Costa JLR, Oishi J, Driusso P. Inserção da fisioterapia na atenção primária à saúde: análise do Cadastro Nacional de Estabelecimentos de Saúde em 2010. Fisioter Pesqui. 2018;25(1):9-19. doi: 10.1590/1809-2950/15774625012018.
- Maia FSE, Moura ELR, Madeiros EC, Carvalho RRP, Silva SAL, Santos GR. A importância da inclusão do profissional fisioterapeuta na atenção básica de saúde. Rev Fac Cienc Med Sorocaba [Internet]. 2015;17(3):110-5. [cited 2020 Jan 10]. Available from: https://bit.ly/2WF50pK
- Saboia DM, Vasconcelos CTM, Oria MOB, Firmiano MLV. Aplicativo educativo para prevenção da incontinência urinária – etapas de construção. Proceedings of the 3rd JOIN; 2017 Oct 12-14; Fortaleza. Fortaleza: Universidade Estadual do Ceará; 2017.
- Lunardi ALB, Vera MAV. Elaboração de cartilha educativa sobre o assoalho pélvico e sua relação com a incontinência urinária [Internet]. Proceedings of the 4th Congresso Brasileiro de

- Fisioterapia em Saúde da Mulher; 2018 May 30-Apr 1; Belo Horizonte. Belo Horizonte: COBRAFISM; [cited 2020 Jan 10]. Available from: https://bit.ly/3ifq8X0.
- Polit DF, Beck CT. Nursing research: generating and assessing evidence for nursing practice. Philadelphia: Wolters Kluwer; 2016
- 10. Hoffmann T, Warrall L. Designing effective written health education materials: considerations for health professionals. Disabil Rehabil. 2004;26(9):1166-73.
- Alexandre NMC, Coluci MZO. Validade de conteúdo nos processos de construção e adaptação de instrumentos de medida. Cienc Saude Colet. 2011;16(7):3061-8. doi: 10.1590/ S1413-81232011000800006.
- 12. Medeiros RKD, Ferreira MA Júnior, Torres GV, Vitor AF, Santos VEP, Barichello E. Validação de conteúdo de instrumento sobre a habilidade em sondagem nasogástrica. Rev Eletronica Enferm. 2015;17(2):278-89. doi: 10.5216/ree.v17i2.28820.
- 13. Haynes SN, Richard DCS, Kubany ES. Content validity in psychological assessment: a functional approach to concepts and methods. Psychol Assess. 1995;7(3):238-47.
- 14. Joventino EM. Construção e validação de escala para mensurar a autoeficácia materna na prevenção da diarreia infantil [master's thesis]. Fortaleza: Universidade Federal do Ceará; 2010.
- 15. Galdino YLS. Construção e validação de cartilha educativa para o autocuidado com os pés de pessoas com diabetes [master´s thesis]. Fortaleza: Universidade Federal do Ceará; 2014.
- 16. Tasca R, Massuda A, Carvalho WM, Buchweitz C, Harzheim E. Recomendações para o fortalecimento da atenção primária à saúde no Brasil. Rev Panam Salud Publica. 2020;6(44):1-8. doi: 10.26633/RPSP.2020.4.
- Gonçalves MS, Celedônio RF, Targino MB, Albuquerque TO, Flauzino PA, Bezerra NA, et al. Construção e validação de cartilha educativa para promoção da alimentação saudável

- entre pacientes diabéticos. Rev Bras Prom Saúde. 2019;32(1):77-81. doi: 10.5020/18061230.2019.7781.
- Lima ACMACC, Bezerra KC, Sousa DMN, Rocha JF, Oriá MOB. Construção e validação de cartilha para prevenção da transmissão vertical do HIV. Acta Paul Enferm. 2017;30(2):181-91. doi: 10.1590/1982-0194201700028.
- 19. Oliveira SC, Lopes MVO, Fernandes AFC. Construção e validação de cartilha educativa para alimentação saudável durante a gravidez. Rev Latinoam Enferm. 2014;22(4):611-20. doi: 10.1590/0104-1169.3313.2459.
- 20. Brubaker L, editor. Uptodate. Educação do paciente: exercícios para os músculos do assoalho pélvico (além do básico); 2016.
- 21. Alves AM. Construção e validação de cartilha educativa para prevenção de quedas em idosos [master´s thesis]. Fortaleza: Universidade Federal do Ceará: 2017.
- 22. Mourão LF, Luz MHBA, Marques ADB, Benício CDAV, Nunes BMVT, Pereira AFM. Caracterização e fatores de risco de incontinência urinária em mulheres atendidas em uma clínica ginecológica. Estima. 2017;15(2):82-91. doi: 10.5327/Z1806-3144201700020004.
- Patrizzi LJ, Viana DA, Silva LMA, Pegori MS. Incontinência urinária em mulheres jovens praticantes de exercício físico. Rev Bras Cienc Mov. 2014;22(3):105-10. doi: 10.18511/0103-1716/ rbcm.
- 24. Oliveira E, Lozinsky AC, Palos CC, Ribeiro DDAM, Souza AMB, Barbosa CP. Influência do índice de massa corporal na incontinência urinária feminina. Rev Bras Ginecol Obstet. 2010;32(9):454-8. doi: 10.1590/S0100-72032010000900007.
- 25. Albuquerque AFLL. Tecnologia educativa para promoção do autocuidado na saúde sexual e reprodutiva de mulheres estomizadas: estudo de validação [master´s thesis]. Recife: Universidade Federal de Pernambuco; 2015.
- 26. Bezerra IC, Silva RM, Bedê JB, Castro PCR, Brasil CCP, Pinheiro CPO. Tecnologia educativa para gestantes: construção e avaliação de cartilha. Cuba Salud. 2018;11(2):1-5.