Cavalcanti M1, Lopes M H2

1. Universidade Estadual de Campinas - Unicamp, 2. Universidade Estadual de Campinas - UNICAMP

# USE OF THE PORTUGUESE VERSION OF THE EDUCATIONAL MATERIAL "YOUR PELVIC FLOOR" AMONG BRAZILIAN TEENAGERS

#### Hypothesis / aims of study

The original version of the educational material "Your Pelvic Floor" for a teenage audience was developed by members of the Association for Continence Advice (ACA), in 2009. In 2013, this educational material was translated and adapted to Brazilian culture. The material is illustrated and colorful, with small format, succinct, composed of five topics related to pelvic floor: explanation of what the pelvic floor is; its functions; importance of these muscles; strengthening exercises in the region; risk factors and prevention of weakening of muscles. The structure of each topic is made by questions and answers.

Our objective was to evaluate the use of the Portuguese version of Brazil's "Your Pelvic Floor" as educational material, among Brazilian adolescents.

## Study design, materials and methods

This was a quasi-experiment study, using pre- and post-test. The research took place in São Paulo, during the months of September and November 2013, in a non-governmental organization (NGO) that develops programs of continuing education for girls 8 to 18 years, with low income.

The study was divided into two phases: development and validation of a questionnaire with questions on the topics covered in "Your Pelvic Floor" and comparison of adolescents' answers to the questionnaire before and after the reading of the educational material.

The developed questionnaire contained five questions with four answer choices: one correct, two incorrect and the answer "do not know". After its completion, the questionnaire, a copy of "Your Pelvic Floor" in Portuguese and an instrument for evaluation of the questionnaire were sent to a Committee of Experts, composed of five members (three physical therapists and two nurses) who, independently, evaluated the relevance, clarity and comprehensiveness of the questions and answers. To measure the correlation between the judges, we used the Content Validity Index (CVI) [1]. Items with IVC≥ 0.80 were considered adequate and needed not necessarily be modified in case of any suggestions for changes. Items with CVI <0.80 should be modified and sent by report for review and approval by the Committee.

Only two items of the questionnaire had IVC <0.80, and ten items that had IVC≥ 0.80 received suggestion of changes. All necessary and suggested changes were made and returned to the judges who approved them. After, the questionnaire was presented to a 15-year-old target group representative who assessed their comprehensibility. The teenager had no difficulties in understanding and thus the questionnaire was considered approved for use in pre- and post-test.

Once completed the questionnaire validation process, three steps were performed with a group of teenagers: pre-test, reading educational material and post-test. In the pre-test, adolescents completed the questionnaire. After this step, the reading of the "Your Pelvic Floor" was held by the group and then the post-test was done using the same questionnaire of the pretest. To compare the results between the pre-test and post-test was done Bowker symmetry test. For all analyzes was considered a significance level of 5% and used the statistical software Statistical Analysis System (SAS) version 9.2 9.

### Results

The participants were 16 adolescents with ages ranging between 11 and 18 years (mean age  $14.06 \pm 2.17$  years). Ten young people were in elementary school and six were enrolled in high school.

Three groups were formed with about five adolescents in each, to facilitate the joint reading of the material. The time for each group was 45 minutes. They had no difficulty understanding the questionnaire. At the beginning of the reading material, most girls showed curiosity on 'pelvic floor' and reported that they had never heard about this. The few who knew something, had acquired this information through television, internet or knew people with pelvic floor dysfunction, such as urinary incontinence and vaginal prolapse. After answering the questionnaire, it was did the reading of the material.

During reading, some adolescents demonstrated that they were unaware of the difference between vagina and urethra, some believed the channel used for intercourse was the same for micturition. Some reported that they lost urine during physical activity or when they were laughing and were unaware that they could seek professional help for these problems.

At the end of the reading, the post-test was performed. The number of correct answers in the post-test was significantly higher when compared to the pre-test (Table 1).

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Table 1 Analysis	s of respons	ses of the p	ore-test	and	post-test	
	Post- test				1 .	
Question1	Correct	Wrong	Do know	not	p-value*	
Pre- test					0,0046	
Correct	3	0	0			
Wrong	1	0	0			
Do not know	10	2	0			
	Post- test					
Question 2	Correct	Wrong	Do know	not	p-value *	
Pre- test					0,0046	
Correct	0	0	0			
Wrong	0	0	0			
Do not know	11	2	3			
0	Post- test					
Question 3	Correct	Wrong	Do know	not	p-value *	
Pre- test					0,0005	
Correct	3	0	0			
Wrong	0	0	0			
Do not know	12	0	1			
Ougstion 4	Post- test			n volue *		
Question 4	Correct	Wrong	Do know	not	p-value *	
Pre- test					0,0011	
Correct	0	0	0			
Wrong	1	0	0			
Do not know	15	0	0			
Question 5	Post- test				p-value *	
Question 5	Correct	Wrong	Do know	not	p-value	
Pre- test					0,0046	
Correct	2	0	0			
Wrong	0	0	0			
Do not know	9	4	1			

<sup>\*</sup> p-value obtained through test Bowker.

# Interpretation of results

When analyzing the responses of adolescents in the pre-test, we find that the theme was little known. Thus, we can consider that the educational material has accomplished his purpose to inform teens about the pelvic floor, its functions and how to prevent some dysfunctions.

Similar searches, which administered questionnaires before and after the implementation of educational workshops on sexuality, prevention of sexually transmitted diseases and pregnancy, also reported an improvement of knowledge of these issues addressed with adolescents [2,3], and also improvement of the dialogue about sexuality between parents and children [3]. These studies confirm that the use of educational material in workshops, lectures and meetings with adolescents about issues of health have positive results, they provide changes and additions to the young people's previous information on specific issues involving health and well-being.

However, there is need for longitudinal studies to assess the impact of the learning and if it led, or not, to a change in the behavior of these teenagers. Nevertheless, it is considered that the dissemination of knowledge is an important step for the incorporation of health practices, although other strategies need to be implemented to bring about a change of attitude, since studies in contraception area, for example, has shown that knowledge alone does not lead to behavior change.

## Concluding message

The educational material "Your Pelvic Floor" in the version in Portuguese of Brazil can be used in educational workshops and individual readings, because it is easily understood by the teenage audience.

It is considered that this is an initial step in a broader process of knowledge construction and changing of attitudes about preventive care of pelvic floor dysfunction among young people, making them more aware of the role and importance of these muscles.

#### References

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