

EFFECTIVENESS OF A HEALTH EDUCATIONAL PROGRAM FOR WOMEN ON LOWER URINARY TRACT SYMPTOMS IN JAPAN

Hypothesis / aims of study

Frequency of symptoms at least once a week in Japanese women aged 40 years or older have been reported, urge incontinence was 10.0%, stress urinary incontinence was 12.6%, overactive bladder (OAB) was 12.5%(1). It is problem for adult women to hold back from consulting a medical staff because of ashamedly even though worry and tortures. The purpose of this study is to reveal effectiveness of a health education program for women on lower urinary tract symptoms (LUTS) in Japan.

Study design, materials and methods

We conducted a questionnaire survey 271 subjects who participated in a health education program on LUTS for women held by two of the health centers in the midland of Japan from February 2010 to March 2011. Questionnaires consisted of 1) living conditions(9 items);spice intake, taking vitamin supplements, snacks intake, drinking, smoking, exercise, sleep, stress, rhythm of life ,2) Overactive Bladder Symptom Score(2)(4 items); urinary frequency per daytime, urinary frequency per night, urinary urgency, frequency of symptoms of urge incontinence, 3)urinary incontinence(2 items) ;frequency of symptoms of urinary incontinence, stress incontinence, 4)consultation(2 items); desire for consultation, desire for consultation place. The health education program consisted of an hour lecture on epidemiology of LUTS, QOL with LUTS, the mechanism of urine formation, cause of urinary incontinence, treatment for LUTS, care for incontinence, bladder training, and a half hour exercise on pelvic floor muscle training(PFMT). After exercise, participants were given a chance for consultation with a nurse or a public health nurse about their urinary condition. Title of the health education was "Let's do it, pelvic floor muscle exercise".

Results

The age of the subjects were 74 (27.3%) people aged under 60 years, 60s 129 (47.6%), 68(25.1%) aged 70 years or older. The subjects with OAB were 85 (31.4%), four were severity (1.5% of all subjects), 48 were moderate (17.7%), 33 were mild (12.2%). OAB group showed no significant differences by age, significant differences by taking vitamin supplements at least once a day ($\chi^2 = 5.985$, $p = 0.011$), sleep less than four days per week ($\chi^2 = 3.853$, $p = 0.034$), stress ($\chi^2 = 4.978$, $p = 0.018$), irregular of life ($\chi^2 = 6.617$, $p = 0.007$). The subjects with symptoms of urge incontinence at least once a week was 57 (21.0%), showed significant by stress ($\chi^2 = 5.603$, $p = 0.013$), irregular of life ($\chi^2 = 5.310$, $p = 0.016$). Stress urinary incontinence at least once a week was 64 (23.6 %) subjects. They did a moderate exercise at least once a week ($\chi^2 = 4.074$, $p = 0.030$), and their life were irregular ($\chi^2 = 5.310$, $p = 0.016$), and sleeping less than four days per week ($\chi^2 = 5.590$, $p = 0.013$). 34.9% of the subjects desired for consultation, their urinary condition were OAB (29.7%), stress urinary incontinence at least once a week (35.1%), urge incontinence (29.7%). During lecture and exercise, the subjects were actively asking questions about urogenital organs, symptoms, micturition and their worry.

Interpretation of results

The prevalence of participants with LUTS was higher than prevalence of adult Japanese women. The participants with OAB believed oral vitamins good for health. We can buy the various vitamin supplements everywhere in Japan. The participants with urinary incontinence or OAB knew the pelvic floor muscle exercises, but never received the instruction despite their interest. Therefore, their knowledge of PMFT and LUTS might be ambiguous, or was incorrect. The first effect of this program was giving a chance for participants with LUTS to ask the question about LUTS and behavioral therapy like intake water, vitamin supplements and spices. The second effect was recommending participants with LUTS to receive medical consultation effectively without making them embarrassed. The Japanese have a habit of radio exercise in groups. In this program, while exercising, participants became to relax and to feel brighter. The third effect was easing for participants with LUTS to heal the loneliness by exercise.

Concluding message

The health educational program for women on LUTS was effective in the following ways.

1. Giving a chance for participants with LUTS to ask the question about LUTS and behavioral therapy like intake water, vitamin supplements and spices.
2. Recommending participants with LUTS to receive medical consultation effectively without making them embarrassed.
3. Easing for participants with LUTS to heal the loneliness by exercise.

References

1. Homma Y, Kakizaki H, Gotoh M, Takei M, Nishiyama T, Hayashi K. Epidemiologic survey on lower urinary tract symptoms in Japan. JNBS.2003.;14(2):266-77
2. Yamaguchi O, Nishizawa O, Takeda M, Yokoyama O, Homma Y, Kakizaki H, Obara K, Gotoh M, Igawa Y, Seki N, Yoshida M. Clinical Guideline for Overactive Bladder. Blacwell Publishing KK.2008:3

Specify source of funding or grant	No funding
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes

<i>Specify Name of Ethics Committee</i>	Ethics Committee of Mie university
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes