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Awareness of Gynecologists About The Role of Physical Therapy in Treatment of Stress Urinary Incontinence

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Abstract

Background: Physical therapy plays an important role in prevention and treatment of stress urinary incontinence but there is a lack of communication between physiotherapists and gynecologists. This study is a trial to investigate the awareness of Egyptian gynecologists by the role of physical therapy modalities used in treatment of stress urinary incontinence.

Purpose :to measure the extend of knowledge by the role of physiotherapy in treatment of stress urinary incontinence and to study what are the limitations that lack of teamwork relationship between gynecologists and physical therapists.

Method: 500 gynecologists participated in the study, there were 128 gynecologists from Upper Egypt, 125 gynecologists from Lower Egypt, 97 gynecologists from Delta, and 150 from Greater Cairo. A questionnaire form had been designed from 20 questions based on the reviewed literature. Data was collected and analyzed using descriptive and quantitative statistics.

Result: The results of this study assured the less awareness of most gynecologists by the role of physical therapy in treatment of stress urinary incontinence

Conclusion: more awareness is needed for gynecologists about the role of physical therapy modalities used for treatment of stress urinary incontinence and more connection is needed between physical therapists and gynecologists to explain physical therapy role.

Key words: Physical therapy- Gynecologists -Stress urinary incontinence

Introduction:

Physical therapy plays an important role in prevention and treatment of stress urinary incontinence, it helps to stimulate and strength pelvic floor muscle, bladder

training, Kegal exercises and biofeedback are considered helpful according to many researches.

Pelvic floor muscle training :

The teaching of PFM contractions is one of the most difficult tasks required of the physiotherapist, probably because the muscles are not directly visible to either patient or therapist, and demonstration cannot be used. It requires a high level of skill particularly in communication, is time consuming, and uninterrupted privacy is essential. A large, simple diagram or a model (or both) of the pelvis, pelvic organs and the levator ani muscles is helpful to show the three openings, and the lifting and gripping effect of the muscle action. Throughout the teaching session the language must be chosen specifically for each individual patient, employing words and images that patient to simulate:

- Stopping passing water/urine
- Stopping passing/breaking wind
- Stopping yourself 'blowing off'/farting
- Stopping diarrhoea/shit/'poo'/'crap'
- Stopping doing a 'pee'/'wee'
- Stopping yourself 'having an accident'/'bursting'
- Trying to stop yourself 'leaking'/'wetting your pants'
- Gripping to stop a tampon falling out[1].

Kegel exercise:

Consist of repeatedly contracting and relaxing the muscle that form part of the pelvic floor. Several tools exist to help with these exercise, although various studies debate the relative effectiveness of different tools versus traditional exercise [2].

How the patient do Kegel exercise:

- Find the right muscle by stop urination in midstream, once the patient identified the pelvic floor muscle she can do the exercise in any position.
- Contract the pelvic floor for five seconds, and then relax for five seconds .Try it four or five times in a row, work up to keeping contracted ten seconds at a time, relaxing for ten seconds between contractions. Aim for at least three sets of ten repetitions a day.
- For best results, focus on tightening only the pelvic floor muscles, avoid flexing the abdominal muscle, thighs or buttocks and avoid holding your breath. Instead breathing freely during the exercise.

  If the patient feel pain in abdomen or back after the exercise, it's a sign that not doing them correctly [3**].**

Biofeedback:

Specific PFM biofeedback equipment using either manometry or EMG with a vaginal/anal sensor (probe) may be used to monitor activity of the PFM during a voluntary contraction, by visual or auditory feedback. However, the position of the patient, probe location, and sensitivity of the equipment can all affect the readings, care must be taken to ensure that any subsequent biofeedback sessions reproduce these factors [4]

Interferential therapy:

Electro stimulation of the pelvic floor is also widely used by physiotherapist in management of female urinary incontinence. The feeling contracting the muscles of the pelvic floor is useful reminder to the patient of the sensation that should be perceived, and they are encouraged to try to contract t`he pelvic floor muscles during treatment [5].

The patient who treated with interferential therapy attend the physiotherapy department 3 times a week .treatment is given with the patient in a semirecumbent position with hip and knees flexed .four large vacuum electrodes were used ,two placed on the abdomen and two placed on the inside of the thighs. An interferential current of between 0 and 100HZ is used ,the intensity depending on the maximum that the patient could comfortably tolerate each treatment is given for 15 minutes [5].

This study is a trial to investigate the awareness of Egyptian gynecologists by the role of physical therapy modalities used in treatment of stress urinary incontinence.

Subjects:

In this study, 500 gynecologists participated in the study. From the 500 gynecologists , there were 128 Upper Egypt, 125 from Lower Egypt, 97 from Delta, and 150 from Greater Cairo.

The data in (Table. 1) represented the number and percentage of gynecologists in each city.

Table.1: Percentage of gynecologists in different cities

Governate	Number	Percentage
Upper Egypt	128	26%
Lower Egypt	125	25%
Delta	97	19%
Greater Cairo	150	30%
Total	500	100%

Materials and Methods:

A questionnaire form had been designed from 20 questions based on the reviewed literature. The broad objective of this questionnaire was to determine the level of gynecologists' awareness about Physical therapy in treatment of stress urinary incontinence.

Questionnaire for Gynecologists

Name:	Experience period(Years):	Hospital:

Governate:	Number of daily cases:	

Question	Yes	No
1- Are preventing stress urinary incontinence limited to medical treatment only?		
2- Are Physical therapy methods important for preventing stress urinary incontinence?		
3- Are treatment of stress urinary incontinence limited to medical treatment only?		
4- Are Physical therapy methods important in treatment of stress urinary incontinence?		
5- Are Physical therapy methods important in pre- and post operative?		
6- Is controlling of stress urinary incontinence a role of teamwork including Gynecologists & Physical therapy?		
7- Has Physical therapy a role in treatment of stress urinary incontinence?		
8- Do you have any idea about Physical therapy modalities used to treat such cases?		
9- Do you refer a case of stress urinary incontinence to Physical therapy before?		
10- Are females suffer from stress urinary incontinence refuse Physical therapy methods?		
11- Are Physical therapy methods safe in treatment of stress urinary incontinence?		
12- Is Pelvic floor muscle training important to treat stress urinary incontinence?		
13- Is kegel exercise important to treat stress urinary incontinence?		
14- Is Interferential therapy important in treat of stress urinary incontinence?		
15- Is Biofeedback important in treat stress urinary incontinence?		
16- Is vaginal cones important in treat stress urinary incontinence?		
17-Is Ball exercise important in treat stress urinary incontinence?		

18- Is intravaginal pessaries important in treat stress urinary incontinence?		
19- Is bladder training important in treat stress urinary incontinence?		
20- Is Acupuncture important in treat stress urinary incontinence?		

Data was collected from gynecologists from different governmental hospitals in Egypt and analyzed using descriptive and quantitative statistics.

Results:

1- Most of gynecologists are agree with that preventing stress urinary incontinence is not limited to medical treatment only.
2- Most of gynecologists are not agree with the importance of Physical therapy methods for preventing stress urinary incontinence.
3- Most of gynecologists believed in role of other medical and paramedical specialties in treatment of stress urinary incontinence.
4- Most of gynecologists didn't know the physiotherapy role in treatment with SUI.
5- Most of gynecologists are not aware by the role of physical therapy in pre and post operative treatment of SUI.
6- Most of gynecologists don’t conceder Physical therapy as one of the teamwork in controlling of stress urinary.
7- Most of gynecologists don’t know Physical therapy role in treatment of stress urinary incontinence.
8- Most of gynecologists don’t have any idea about Physical therapy modalities used to treat SUI.
9- Most of gynecologists didn’t refer a case of stress urinary incontinence to Physical therapy before.
10- Most of gynecologists reported refusal to Physical therapy methods from females suffered from stress urinary incontinence.
11- Most of gynecologists considered Physical therapy methods safe in treatment of stress urinary incontinence.
12- .Most of gynecologists considered Pelvic floor muscle training important to treatment stress urinary incontinence.

13- Most of gynecologists didn't consider Kegel exercise important to treatment of stress urinary incontinence.
14- Most of gynecologists didn't consider Interferential therapy important in treat of stress urinary incontinence.
15- Most of gynecologists didn't consider Biofeedback important in treatment of stress urinary incontinence.
16- Most of gynecologists didn't consider vaginal cones important in treatment of stress urinary incontinence.
17- Most of gynecologists didn't consider Ball exercise important in treatment of stress urinary incontinence.
18- Most of gynecologists didn't consider intra-vaginal pessaries important in treatment of stress urinary incontinence.
19- Most of gynecologists assured in importance of bladder training in treatment of stress urinary incontinence.
20- Most of gynecologists didn't consider Acupuncture important in treatment of stress urinary incontinence.

Table. 2 : Percentage of different answers for each question

Questions	"Yes" answers		"No" answers	
	N	%	N	%
1- Are preventing stress urinary incontinence limited to medical treatment only?	29	5.8%	471	94.2%
2- Are Physical therapy methods important for preventing stress urinary incontinence?	230	46%	270	54%
3- Are treatment of stress urinary incontinence limited to medical treatment only?	40	8%	460	92%
4- Are Physical therapy methods important in treatment of stress urinary incontinence?	206	41.2%	294	58.8%
5- Are Physical therapy methods important in pre- and post operative?	94	18.8%	406	81.2%
6- Is controlling of stress urinary incontinence a role of teamwork including Gynecologists & Physical therapy?	39	7.8%	461	92.2%
7- Has Physical therapy a role in treatment of stress urinary incontinence?	165	33%	335	67%
8- Do you have any idea about Physical therapy modalities used to treat such cases?	72	14.4%	428	85.6%
9- Do you refer a case of stress urinary incontinence to Physical therapy before?	111	22.2%	389	77.8%
10- Are females suffer from stress urinary incontinence refuse Physical therapy methods?	367	73.4%	133	26.6%
11- Are Physical therapy methods safe in treatment of stress urinary incontinence?	488	97.6%	12	2.4%
12- Is Pelvic floor muscle training important to treat stress urinary incontinence?	464	92.8%	36	7.2%
13- Is kegel exercise important to treat stress urinary	63	12.6%	437	87.4%

incontinence?				
14- Is Interferential therapy important in treat of stress urinary incontinence?	13	2.6%	487	97.4%
15- Is Biofeedback important in treat stress urinary incontinence?	93	18.6%	407	81.4%
16- Is vaginal cones important in treat stress urinary incontinence?	42	8.4%	458	91.6%
17-Is Ball exercise important in treat stress urinary incontinence?	31	6.2%	469	93.8%
18- Is intravaginal pessaries important in treat stress urinary incontinence?	78	15.6%	422	84.4%
19- Is bladder training important in treat stress urinary incontinence?	310	62%	190	38%
20- Is Acupuncture important in treat stress urinary incontinence?	7	1.4%	493	98.6%

Disscusion:

According to the International Continence Society, Stress Urinary Incontinence (SUI) is defined as the involuntary leakage of urine through the urethra with exertion such as coughing, sneezing, and laughing. An increase in abdominal pressure due to physical exertion places stress on the bladder, causing urine to leak. The basic mechanisms of failure of the urethra to maintain water-tight seal are poor urethral support by the pelvic floor muscles and intrinsic sphincter deficiency [6]

Physiotherapy includes education about bladder and bowel management and behavioral modification that decreases the symptoms of stress and urges incontinence. Pelvic floor muscle retraining may decrease risk of early pelvic organ prolepses, as one of the functions of the pelvic floor muscles is to support the genital organs [7]**.**

Women with bladder over-activity (presenting with symptoms such pelvic floor physiotherapists also provide bladder training for as frequency, urgency and urge

incontinence). Bladder training is more than just 'hanging on'. It involves learning to switch on the neural control of the bladder and engage the PF muscles to close the urethra and prevent urine leakage. These strategies have been shown to be more effective than medication, but some women may benefit from medication as well if the response to bladder training is not sufficient. A PF physiotherapist will assess treatment outcomes objectively to underpin decision making [8].

Physical therapy plays an important role in prevention and treatment of stress urinary incontinence but there is a lack of communication between physiotherapists and gynecologists. This study is a trial to investigate the awareness of Egyptian gynecologists by the role of physical therapy modalities used in treatment of stress urinary incontinence.

to measure the extend of knowledge by the role of physiotherapy in treatment of stress urinary incontinence and to study what are the limitations that lack of teamwork relationship between gynecologists and physical therapists.

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We concluded that, more awareness is needed for gynecologists about the role of physical therapy modalities used for treatment of stress urinary incontinence and more connection is needed between physical therapists and gynecologists to explain our role.

In 2006 Noha found that more awarness is needed for both pregnant females and health providers about benefits and components of antenatal care in Egypt. These results may explain lack of awarness of expectant mothers and obstetricians about physical therapy modalities used to relieve pain during labour[9]

Asmaa also found that more awareness is needed for both expectant mothers and obstetricians about physical therapy modalities used for relieving labour pain[10].

Another thesis done in faculty of physical therapy approved that awareness is needed for both gynecologists and adolescent females about physical therapy modalities used for relieving pain of primary dysmenorrheal[11].

This study is the first study to be done in Egypt and it showed that there is less awareness of Gynecologists about the role of Physical Therapy in treatment of Stress Urinary Incontinence

Conclusion:

From the above findings, we can conclude that:

1- More awareness is needed for gynecologists about the role of physical therapy modalities used for treatment of stress urinary incontinence.
2- More connection is needed between physical therapists and gynecologists to explain the role of physical therapy modalities in treatment of stress urinary incontinence.

Recommendations:

1. Arrange conferences in different hospitals to increase gynecologist's awareness about physiotherapist role in prevention of stress urinary incontinence and increase gynecologist's awareness about physical therapy modalities used to treat stress urinary incontinence.
2. More researches are needed to determine the level of awareness of gynecologists by effect of physical therapy modalities to treat other gynecological conditions.

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