

Pelvic Physiotherapy Distance Journal Club January 11, 2017

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Clinical Question: What is the relationship between knowledge of pelvic anatomy and pelvic health?

Article number 1

Hebert-Beirne JM, O’Conor R, Ihm JD, Parlier MK, Lavender MD, Brubaker L, A **Pelvic Health Curriculum in School Settings: The Effect on Adolescent Females’ Knowledge**, Journal of Pediatric and Adolescent Gynecology (2015), doi: 10.1016/j.jpag.2015.09.006.

Background: In general, my patients do not have practical knowledge of pelvic anatomy, or normal bladder and bowel health. They often report that they have “always had a weak bladder” or have been constipated since teenage. I spend a huge amount of time providing education to my patients.

The Total Control Program and the Women’s Health Foundation is a nonprofit organization committed to bringing pelvic health and wellness to all women. This organization partnered with a multidisciplinary team of adolescent health experts to design and tailor WHF health educational materials for adolescents. Since this study, they have published an excellent book and now website and app for adolescent girls 10-14 called Below Your Belt.

Belowyourbelt.org

A pilot evaluation of a draft educational curriculum on pelvic health was performed and the curriculum was revised using the Theory of Planned Behavior that emphasizes the role of one’s social ecology (and importantly, peer support) on individual behavior.

The objective of the study was to ascertain baseline knowledge of pelvic anatomy and function among adolescent females and test the educational effectiveness of the curriculum.

Western IRB approved this study conducted at 3 Chicago schools serving racial and ethnic

minority students

Inclusion: English speaking, enrolled in 7,8,9,10th grade n=222, parental consent, student assent. (n=168)

Elective Gym or science class- randomly assigned to intervention or control group Intervention group- 6 weekly one hour classes , see Table 1

Control group – regular class

The primary outcome was the change from baseline score on knowledge items.

- 1- Adolescent Bladder and Pelvic Health Questionnaire (ABPHQ) was used to measure both baseline and change in knowledge in and experience with the pelvis. ABPHQ is comprised of 45 items focused on pelvic health knowledge, pelvic-related behaviors, and perceptions of experiences relevant to the pelvis
- 2- Anatomical knowledge of the female pelvis

Results:

Table 3: 65% SUI, 72% nocturia, 27.1% urgency UI, 14.9% SUI during sports, 49.1% reported constipation.

Table 4, 5, : Baseline knowledge of Pelvic anatomy and function was poor including inability to identify the pelvic organs, bones, muscles

Table 6 : Change in Knowledge- intervention group demonstrated knowledge with a 7- fold increase in the percent of participants aware of pelvic floor anatomy, a nearly 5 fold increase in the percent of participants who report understanding the benefits of pelvic muscle exercise, students who participated in the intervention arm were more likely to change to correct answers on the post-test on all knowledge questions

Discussion.

- 1- young women have poor knowledge of pelvic health and function, and behaviors
 - a. they also have a large number of pelvic floor symptoms!
- 2- educational intervention improved knowledge
- 3- public health implications- goal of keeping the population healthy

- a. adolescents may not recognize pelvic dysfunction such as leakage
- b. delays communication about symptoms, delays care
- c. increased time spent by providers providing education.
- d. (avoidance of physical activity during menstruation and link to obesity)

CASE- 15 year old volleyball player, leaking between classes and during sport, eval, anatomy education, external exam and sEMG assessment and rx, bladder health education, void log and fluid recs, 2nd rx 3 weeks later, no longer leaking, sEMG, fluid management

Questions for journal club group discussion:

- 1- How does your practice provide care to the adolescent community? Does the community know that treatment is available?
- 2- What is your evaluation and treatment method?
- 3- Rhetorical- How can a patient population with no pelvic health awareness achieve good pelvic health?