ISSN: 2640-7477

Review Article

Journal of Gastroenterology & Digestive Systems

Knowledge, Attitude and Practice of Physician toward Pelvic Floor Dysfunction KAP of Physician toward PFD

Haifaa M Malaekah*, Rahaf Suhail Alotaibi and Maha Zeid Albogami

King Abdullah bin Abdulaziz University Hospital, princess Nourah bint Abdulrahman University

***Corresponding author**
Dr. Haifaa Malaekah, Colorectal & General Surgery, King Abdullah bin Abdulaziz University Hospital, Simulation, and Skills Development Center, Princess Nourah bint Abdulrahman University Riyadh, Kingdom of Saudi Arabia, Tel: +966-5989 79986; E-mail: h_malaika@hotmail.com.

Submitted: 16 Jan 2019; **Accepted:** 23 Jan 2019; **Published:** 09 Mar 2019

Literature Review

Pelvic floor dysfunction (PFD) as a term includes underlying different sub-conditions the major ones are pelvic organ prolapse (POP), urinary incontinence (UI), fecal incontinence (FI), sexual function. The direct effect of dysfunction in these areas can affect the quality of life on a personal and healthy level in patients with PFD.

POP can be defined as the abnormal location of pelvic viscera includes uterus, bladder, rectum and small intestine within/outside the vagina. UI and FI defined as the involuntary passage of fecal content and bladder which is a socially and hygienic problem for patients [1, 2].

The etiology of PFD is still fully unknown yet numerous risk factors have been identified through different studies in many countries to educate people and reduced the incidence by preventing those risk factors associated with PFD, the first significant risk is:

Female gender jelovesk JE et al found the relation between PFD and females gender. Studies show a high percentage of 11% - 35.5% of women experience PFD worldwide [3, 4]. As statistics in a study in USA estimate that 3.9 millions of outpatients females have PFD and that number can be a burden on an economic level yet beneficial to prepare a steady plan to overcome this increasing issue. In comparison with KSA, still, there is no a clear number of patients with PFD which can be a major Retreat in the progress of treatment plan as some physician might be unaware of the term PFD.

PFD: Pelvic Floor Dysfunction
POP: Pelvic Organ Prolapse
UI: Urinary Incontinence
FI: Fecal Incontinence
HT: Hormone Therapy
LSCS: Lower Segment C-Section
PFPT: Pelvic Floor Physical Therapy
PFMT: Pelvic Floor Muscle Training

Saudi Arabia as part of the Middle East has the most incidence yet still unidentifiable percentage or numbers present. According to world population data sheet 2005 middle east has a high prevalence of PFD as the age expectancy is >70 and fertility rate is >4% in many countries. Women with PFD symptoms rarely approach medical help to cure their conditions because of society, limited public knowledge, and cultural belief. Their preference with a same-gender physician is influenced by religion [5, 6]. Another factor emphasizes that KSA has many cases is Islam. Muslim women have daily duty called praying that requires kneeing down and ablution after every urination and defecation it can be harmful and reduce the quality of life for Middle Eastern Muslim women with UI, FI [7].

The second most associated risk with PFD is Age: Women over 65 years a third of them experience PFD symptoms and that shows the high prevalence of PFD among older females and explains how Age is a significant Risk. With age muscle within the pelvic floor weakened and this play rule in the pathophysiology of PFD [8, 9]. In the regional area here in middle east Study was published in Iran 2012 to determine risk factors associated with women developing PFD the finding of the study was 129 out of 304 within the age 44-50 had PFD with evaluating their medical history it illustrates connected risk factors with the pathophysiology of PFD [10]:

1. **Hormone Therapy (HT)** the reduced level of estrogen hormone can weaken pelvic floor during menopause so they Observed the relation between HT in reducing UI yet the author in this research paper compare the finding of this study with different study findings by Nygard that there is no such a relation between HT and PFD that can be due to different age, tools used and performed in these studies and that loosen the accurate etiology of PFD [8, 11].
2. **BMI** people with high BMI have a mutation in their adrenergic receptor and that loosens pelvic floor muscle and causes the urge and urinary incontinent [12].
3. **Pregnancy** female risk is much higher compare to men due to a major rule of pregnancy in developing PFD [13]. Different studies show the strong connection between pregnancy and PFD as a study in the regional area found that nulliparous has a much lower risk for developing PFD compare to women with 8 or more deliveries had 15 times chances of prolapse [2]. With pregnancy uterine volume increases over the pelvic floor area and that puts pressure, stress on viscera including bladder, perineal structures can lead to modification in UI and frequency [9].

During delivery excessive stretching and tearing in pelvic muscles, connective tissue can weaken pelvic floor area postnatally so studies found that women who got c-section are faster to heal and restore pelvic floor strength compare to women who went for natural delivery yet other study been published in India the result of the study was there is no significant reduced in incidence of PDF after Lower segment c-section (LSCS) as preventable procedure [14, 15].

Treatment decision should be undertaken for PFD by the type, patient preference and the availability of specialist [16]. Treatment option for PFD is divided into two main categories:

1. **The non-surgical treatment** includes pelvic floor physical therapy (PFPT), pharmaceutical, lifestyle interventions by pelvic floor muscle training (PFMT) is based on increasing muscles strength PFMT is used for both prevention and treatment of PFD symptoms the non-surgical treatment is chosen by the majority of patients as they have a low risk of side effect and can be used as a follow up after the surgical intervention [17-19].
2. **Surgical treatment** includes minimally invasive implant/ injection procedure [20]. a study been published in North America 2008 for treatment of women with PFD the method used in the study with 127 participants is too divided them into two group surgical and a non-surgical procedures they were set to a 12 months treatment plan and 4 follow up surveys with different interval to evaluate their improvement the outcome of this study was surgical group achieved their treatment goals than the non-surgical group and they conclude their research paper by saying that patient-centered outcomes are recommended in research trials, clinical practice to educate patient with treatment plan and to a certain extent this can be motivated to them in the treatment journey.

PFPT is a therapy focuses on mobility and function of structures within the pelvic floor or around the pelvic girdle muscle, nerve, ligaments, lymphatic system, and connective tissue, joint pelvic floor physical therapists use in their session's external or internal manual therapies [21, 22]. For instance connective tissue manipulation, myofascial release and joint and scar tissue mobilization. The manual therapy uses palpation to loosen the spastic muscle and lengthen the tightened tissue to relieve stress and pain in the area. Therapies such as neuromuscular electrical stimulation and biofeedback use technology to help women restore their functional awareness of the pelvic floor, improve muscle coordination [6]. Adherence to PFPT is fundamental for the treatments goals as the effect of any training program will disappear if it's not maintained over time [23].

Increasing Knowledge for healthcare provider about PFPT is beneficial for both patients and their families. First line treatment for PFD should have low risk, less invasive and safer so surgery and medication are not acceptable to use as first management choice as they have a higher percentage of risks [22].

A pelvic floor is a functional unit. If any dysfunction occurs, a variety of symptoms will appear. Complaints like urinary incontinence, sexual dysfunction, pelvic organ prolapse, and defecation disorders will direct the patient to different specialties while seeking medical care. Primary care providers are the frontline managers for these symptoms. Assessing their knowledge and attitude and practice toward these disorders is an important thing to ensure the high quality of healthcare provided.

In Israel, a prospective cohort study was done by Haim Krissi et al to evaluate the role of primary care providers in the delay of diagnosing lower urinary tract symptom and pelvic organ prolapse [24]. A questionnaire was filled by each patient who was referred from primary clinic to major hospital clinic for further assessment. Delay was defined as the duration between onset of patients' complaints and presenting at the hospital clinic (average delay duration, 43.8 months). According to the patients' answers, 65.9% blamed themselves for the delays while 33.5% blamed their primary physicians. The explanations were given by physicians for this delay either they thought it was part of natural aging or the progression of the case did not need further management. The paper recommends enhancing the primary physician awareness and knowledge of pelvic floor disorders screening, diagnosis, and management. This study has a shortage of covering patients with fecal incontinence and sexual dysfunction.

In Netherland Gastroenterologists' awareness of the correlation between symptoms of posterior pelvic floor compartment and PFD was assessed [25]. Results showed that most of the gastroenterologist checked urinary tract symptoms in their usual history taking; more than 80%. In contrast to sexual dysfunctions, only 38% of physicians asked male patients about them and 60% if the patients were female. Most of the respondents clarified their ignorance to Sexual Function [3]. First ranked no importance in their practice, second-ranked lack of knowledge. Majority of participants agreed that they needed more training in PFD management of female (61%) and male (46%).

In the United Kingdom a study was performed to evaluate the currently provided services for PFD with the sample containing 63 medical consultants and 45 GP [26]. Only 12 consultants and 3 GPs found that the provided guidelines are very useful while 38 consultants and 23 GPs said it was moderately useful. The remainders did not read them or said it was not useful. The compliance to the existing guidelines for POP, UI and fecal incontinence [24]. The study also investigated the time dedicated to PFD; the urogynecologist between 60% to 100%, less or equal to 20% by an urologist and colorectal surgeons and less than 1% of general practitioner practice.

In the United States a cross-sectional study performed by14-item questionnaire was distributed within the health system' primary care providers to investigate the confidence of PCPs in managing PFD [27]. 85.0% reported that they were comfortable in treating UI and 84.9% for OAB. They managed UI (92.6%), OAB (88.9%) by themselves and referred to urology if resistant to treatment. Unlike OAB and UI, POP was underestimated by PCPs (50.9%) the common idea it was a rare disorder and occurred in less the 10% of women population. Most of the respondents (61.1%) reported that they never or rarely screened for POP. Only 3.7% of the respondents were comfortable in diagnosing POP. 88% of them would immediately refer the POP patients to specialty. In this paper, bowel disorders were unmentioned, also.

In sub-Saharan, urogynecologist attitude toward postnatal PFD was evaluated [28]. Demographic data, risk factors, protection and assessment tools of postnatal PFD, counseling pattern, personal or spousal preference for C-section as a prevention method of PFD were assessed in the electronic survey. Majority of the respondents showed a high level of awareness about risk and protective factors. On the other hand, there was a huge disagreement on whether C-section considered a protective factor of PFD (51.8%) or not

(48.2%). Regarding enquiring about symptoms of PFD, 32.9% of the doctors denied asking about it in clinical practice prenatally and 24.9% postnatally. As counseling on postnatal PFD, 39.2% did not apply it routinely. Antenatal pelvic floor muscle training was not recommended to pregnant women routinely 37.5%. C-section was favored as postnatal PFD preventive measure by 25% for themselves or spouses. More years in practice was related to higher rates of prenatally and postnatally counseling of PFD.

In a similar study performed in the United State on obstetrical providers evaluated their counseling practice regarding postpartum PFD. The study reported a lack of prenatal patient education about PFD, 56.3% never conversed postpartum UI and 73.6% for fecal incontinence. Also, the participants never mentioned PFD as a factor while comparing delivery methods. The reasons reported for not counseling are: not enough time 39.9%, lack of knowledge 30.1%, normal part of pregnancy and delivery 14.5%, low incidence was seen 13.9% and 7.5% were concerned that the pregnant woman will elect C-section. 33.3% of respondents were never referred primiparous with PFD to physical therapy and 28.6% never to urogynecologist according to their symptoms [29].

According to an article by Elizabeth R.et al; majority of first (89%) and second (80%) year medical student had no exposure to PFD, 95% of third-year students had gone through PFD topics from different specialties aspects. 60% of third students had at least 1 day in urogynecology services which was not enough to gain knowledge. The article reassures that there is a large gap in teaching the medical student about PFD [30]. Lastly, in different areas around the world, studies plot deficiency in physicians' knowledge, attitude and practice. Yet there are no similar studies found in Saudi Arabia.

Acknowledgment

We thank Dr. Weam Banjar, DDS, and an assistant researcher, for useful topical and intellectual discussion about the research.

References

1. Hullfish KL, Bovbjerg VE, Gurka MJ, Steers WD (2008) Surgical versus nonsurgical treatment of women with pelvic floor dysfunction: patient-centered goals at 1 year. The Journal of urology 179: 2280-2285.
2. Walker GJ, Gunasekera P (2011) Pelvic organ prolapse and incontinence in developing countries: a review of prevalence and risk factors. International urogynecology journal 22: 127-135.
3. Megabiaw B, Adefris M, Rortveit G, Degu G, Muleta M, et al. (2013) Pelvic floor disorders among women in Dabat district, northwest Ethiopia: a pilot study. International urogynecology journal 24: 1135-1143.
4. Islam R, Bell R, Billah B, Hossain M, Davis S (2016) The prevalence of symptomatic pelvic floor disorders in women in Bangladesh. Climacteric 19: 558-564.
5. Sung VW, Raker CA, Myers DL, Clark MA (2009) Ambulatory care related to female pelvic floor disorders in the United States, 1995-2006. American journal of obstetrics and gynecology 201: 508(e1-e6).
6. Rizk DE, El-Safty MM (2006) Female pelvic floor dysfunction in the Middle East: a tale of three factors-culture, religion, and socialization of health role stereotypes. International Urogynecology Journal 17: 436-438.
7. Rizk DE, Hassan MY, Shaheen H, Cherian JV, Micallef R, et al. (2001) The prevalence and determinants of health care-seeking behavior for fecal incontinence in multiparous United Arab Emirates females. Diseases of the colon & rectum 44: 1850-1856.
8. Nygaard I, Barber MD, Burgio KL, Kenton K, Meikle S, et al. (2008) Prevalence of symptomatic pelvic floor disorders in US women. Jama 300: 1311-1316.
9. Bozkurt M, Yumru AE, Şahin L (2014) Pelvic floor dysfunction, and effects of pregnancy and mode of delivery on the pelvic floor. Taiwanese Journal of Obstetrics and Gynecology 53: 452-458.
10. Eftekhar T, Ghanbari Z, Kalantari F, Shariat M, Haghollahi F (2012) The frequency of pelvic floor dysfunctions and their risk factors in women aged 40-55. Journal of Family and Reproductive Health 6: 59-64.
11. Lachowsky M, Nappi RE (2009) The effects of estrogen on urogenital health. Maturitas 63: 149-151.
12. Bai SW, Kang JY, Rha KH, Lee MS, Kim JY, et al. (2002) Relationship of urodynamic parameters and obesity in women with stress urinary incontinence. The Journal of reproductive medicine 47: 559-563.
13. Memon HU, Handa VL (2013) Vaginal childbirth and pelvic floor disorders. Women's Health 9: 265-277.
14. Thorp Jr JM, Norton PA, Wall LL, Kuller JA, Eucker B, et al. (1999) Urinary incontinence in pregnancy and the puerperium: a prospective study. American journal of obstetrics and gynecology 181: 266-273.
15. Chitra T, Panicker S (2011) Childbirth, pregnancy, and pelvic floor dysfunction. The Journal of Obstetrics and Gynecology of India 61: 635-637.
16. Porrett T (2006) Understanding pelvic floor dysfunction and its relevance to colorectal nursing. Gastrointestinal nursing 4: 20-26.
17. Johnson VY (2001) How the principles of exercise physiology influence pelvic floor muscle training. Journal of Wound Ostomy & Continence Nursing 28: 150-155.
18. Milne JL (2004) Behavioral therapies at the primary care level: the current state of knowledge. Journal of Wound Ostomy & Continence Nursing 31: 367-376.
19. Lajiness MJ, Wolfert C, Hall S, Sampselle C, Diokno AC (2007) Group session teaching of behavioral modification program for urinary incontinence: establishing the teachers. Urologic nursing 27: 124.
20. Davis K (2010) Pelvic floor dysfunction: management strategies. Practice Nursing 21: 409-415.
21. DeBevoise TM, Dubinsky AF, McCurdy-Robinson CB, McGee CM, McNeely CE, et al. (2015) Pelvic floor physical therapy: more than Kegels. Women's Healthcare 3: 34-41.
22. Lawson S, Sacks A (2018) Pelvic Floor Physical Therapy and Women's Health Promotion. Journal of Midwifery & women's health 63: 410-417.
23. Mørkved S, Bø K (2014) Effect of pelvic floor muscle training during pregnancy and after childbirth on prevention and treatment of urinary incontinence: a systematic review. Br J Sports Med 48: 299-310.
24. Krissi H, Eitan R, Peled Y (2012) The role of primary physicians in the diagnostic delay of the lower urinary tract and pelvic organ prolapse symptoms. European journal of obstetrics, gynecology, and reproductive biology 161: 102-104.
25. Nicolai MP, Fidder HH, Bekker MD, Putter H, Pelger RC,

et al. (2012) Pelvic floor complaints in gastroenterology practice: results of a survey in the Netherlands. Frontline Gastroenterology 3: 166-171.
26. Davis KJ, Kumar D, Wake MC (2010) Pelvic floor dysfunction: a scoping study exploring current service provision in the UK, interprofessional collaboration and future management priorities. International journal of clinical practice 64: 1661-1670.
27. Mazloomdoost D, Westermann LB, Crisp CC, Oakley SH, Kleeman SD, et al. (2017) Primary care providers' attitudes, knowledge, and practice patterns regarding pelvic floor disorders. International urogynecology journal 28: 447-453.
28. Cooke CM, O'Sullivan OE, O'Reilly BA (2018) Urogynaecology providers' attitudes towards postnatal pelvic floor dysfunction. International urogynecology journal 29: 751-766.
29. Dessie SG, Hacker MR, Dodge LE, Elkadry EA (2015) Do Obstetrical Providers, Counsel Women about Postpartum Pelvic Floor Dysfunction? The Journal of reproductive medicine 60: 205-210.
30. Mueller ER, Kenton K, Rogers RG, Fenner DE (2009) Are we missing an opportunity to teach future physicians about female pelvic floor disorders? International urogynecology journal and pelvic floor dysfunction 20: 1413-1415.