



A STUDY ON INCIDENCE OF PELVIC FLOOR DYSFUNCTION AMONG NON-MEDICAL PROFESSIONAL WOMEN WORKING IN SAVEETHA UNIVERSITY

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ABSTRACT

Pelvic Floor Dysfunction is associated with network of symptoms, it comprises of pelvic organ prolapse, fecal or urinary incontinence and sexual dysfunction. Symptoms include pelvic pain, pressure, dyspareunia, incontinence, incomplete emptying. Tissues surrounding the pelvic organs may have increased or decreased sensitivity resulting in pelvic pain. The condition affects up to 50% of women. Pelvic floor dysfunction is due to the dysfunction of pelvic floor muscles, ligaments, and tissues that act like a hammock to support the organs of the pelvis: (the uterus, vagina, bladder, urethra, and rectum). It is believed that the Indian based women will not bring out these kinds of issues to the physician because of their cultural background. The women who have knowledge about these signs and the seriousness will approach physicians for further management. Those women are mostly from medical or paramedical background or some may get to know through their friends or siblings. This study aims to evaluate the level of risk for pelvic floor dysfunction among the non-medical profession middle aged women in Saveetha University. This observational study was carried out in Saveetha Engineering College, Saveetha School of Engineering, Saveetha School of Law, Saveetha School of Management. Based on inclusion and exclusion criteria, the subjects were selected, PFD - self-administered questionnaire was given and the outcome was measured. The percentage calculation was done to find out the high risk and low risk for pelvic floor dysfunction. 20% of the evaluated middle aged non-medical professional women in Saveetha University has high risk for pelvic floor dysfunction and 73% has low risk for pelvic floor dysfunction. This survey was conducted with small sample size, hence the results cannot be generalised. Since the participants are belonging to non- medical profession, they might be unaware of these issues which they had neglected in the early stages and now they are at risk for pelvic floor dysfunction. The occurrence of pelvic floor dysfunctions suggested that physicians seeing women seeking care for one condition should inquire about symptoms of other disorders also.

KEYWORDS: *urinary incontinence, fecal incontinence, pelvic organ prolapse, sexual dysfunction, middle aged women, Non-medical Professional, PFD -Questionnaire.*



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Received on: 13-04-2017

Revised and Accepted on: 27-09-2018

DOI: <http://dx.doi.org/10.22376/ijpbs.2018.9.4.b124-127>



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INTRODUCTION

Pelvic floor dysfunction, including urinary incontinence (UI), fecal incontinence, pelvic organ prolapsed (POP), and sexual dysfunction represent a major public health issue. Women with these disorders suffer physical and emotional distress, and the economic effect of these disorders on the health care system is substantial.^{1,2} Pelvic floor muscles are the small group of muscles which supports the pelvic organs (bladder, uterus, rectum) and helps in maintaining the bladder and bowel control¹. The pelvic floor dysfunction results when the muscles supporting the pelvic organs become weakened or injured. It occurs in the case of pregnancy, vaginal delivery, obesity, chronic cough and constipation³. Clinically, these problems are mostly addressed by the postmenopausal and postnatal women. This issue was not addressed unless or until it has been asked during clinical examination. Most of the women are too embarrassed to discuss the issues with their physicians, and the belief that incontinence is a normal part of aging⁴. This misconception leads to worsening of the condition in later life. In our clinic, the women who are non-medical profession and from rural area report this issue often than the women from medical background. The objective of this study is to evaluate and educate about the risk factor of pelvic floor dysfunction among the middle aged women working in nonmedical profession at Saveetha University, Tamil Nadu, India.

MATERIALS AND METHODS

After getting scientific review board and human Ethical clearance (BPT 31/ SU/66/2013), 150 married non-medical professional females in between the age group of 21 to 40 years were selected through simple random sampling method for present research work. Information

sheet was given (Table 1) and the research procedure was explained to the participants and the informed consent was obtained. Those who have pelvic nerve injuries, post-menopausal, non-cooperative women were excluded from the study. This observational study was carried out in Saveetha engineering college, Saveetha School of Engineering, Saveetha School of Law, Saveetha School of Management at Saveetha University. After briefing them about the procedure, the PFD - self-administered questionnaire were distributed to individuals. The questionnaire was adopted from several questionnaires from previous studies⁵⁻¹⁰ and additional clinically relevant questions were included. The validation of questionnaire were done by the experts in the same field. The questionnaire had provided to all the participants and they were asked to go through it and to fill up YES or No. Each 'yes' answer carried '1' point and each 'No' answer carried '0' point. The maximum score was considered as high risk population for pelvic floor dysfunction. The minimum score was considered as low risk population for pelvic floor dysfunction and '0' score will consider with no risk. While collecting the questionnaire for all the participants, the self-explained information sheet about Pelvic Floor Dysfunction were given. The queries regarding pelvic floor dysfunction were clarified at the end of the session.

RESULTS

The Percentage calculation was done to find out the high risk and low risk for pelvic floor dysfunction. Based on the obtained values 20% of the middle aged non-medical professional women in Saveetha University have high risk for pelvic floor dysfunction and 73% has low risk and 7% comes in no risk for pelvic floor dysfunction.

Table 1
Risk level for pelvic floor dysfunction among non-medical professional women in saveetha university.

Total number of participants	High Risk	Low Risk	No Risk
150	30	110	10

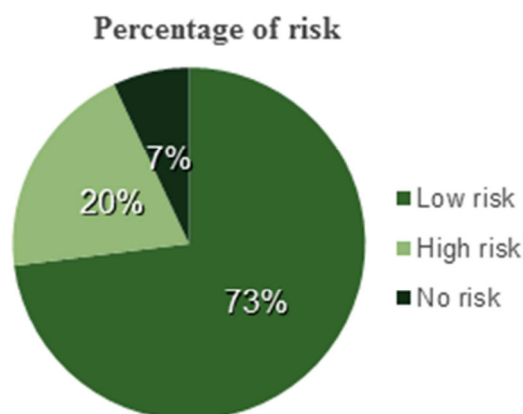


Figure 1
Percentage of risk level for pelvic floor dysfunction among non-medical professional women in saveetha university.

Figure 1 shows that 73% of women has low risk, 20% of women has got high risk and 7% of women has no risk for pelvic floor dysfunction.

DISCUSSION

Based on this study only 7% of women have no risk, 73% of women have low risk and 20% of women have high risk for pelvic floor dysfunction. The study was to know the risk level for pelvic floor dysfunction among non-medical professionals in Saveetha University for which questionnaires was made in such a way to address all the practical difficulties facing day to day life by the women due to pelvic floor dysfunction. The signs and symptoms of pelvic floor dysfunction and how far it affects the quality of life was also assessed. Women who participated in the study were hesitating and were embarrassed to discuss about these issues when we approached them personally. According to their response to the questionnaire, most of the women who came under low risk are prone to leak urine during sneezing and coughing. It shows that women who come under low risk also have pelvic floor muscle weakness. If it is not addressed earlier they will come in the high-risk group as the age progress. Nygaard et.al., in his study 'Pelvic Organ Prolapse in Older Women: Prevalence and risk factors state that the proportion with prolapse increased as the patient's age increased and also increased during and after pregnancy⁴. This issues needs to be addressed seriously to have a better quality of life. Physicians seeing women seeking care for a female pelvic floor dysfunction should be aware of this

high co-occurrence of these conditions and should inquire about symptoms of other pelvic floor disorders too. Jean M. Lawrence et.al., in their study the high co-occurrence of pelvic floor disorders suggest that physicians seeing women seeking care for one condition should inquire about symptoms of other disorders¹¹. Though the women were from educated background, they had a lot of doubts and which was clarified at the end of the session by the researcher and co researchers. Some of them were not at all aware about pelvic floor dysfunction symptoms and they said it is natural as the age progress. From this study, it can be concluded that the lack of awareness also could be the reason for the women who have risk for pelvic floor dysfunction. This can be overcome through awareness programs¹¹. Bo Liu et.al., studied 'Prevalence and Risk factors of Urinary Incontinency among Chinese women in Shanghai. It was found that the most Chinese women did not have any knowledge of UI, and they lived with the disease without early diagnosis and proper treatments¹². In rural areas, the women will not be much aware about these issues and if they have symptoms of pelvic floor dysfunction also they will hesitate to bring it to medical care. The government has to take necessary steps to appoint health care professionals to rule out these issues post delivery as the women comes to primary health centers for follow ups. The early diagnosis and rehabilitation reduces the economic burden and also aids the women to have enhanced quality of life. It is recommended to do future studies with large sample size including rural community.

APPENDIX - A

Pelvic Floor Dysfunction - Self administered Questionnaire (PFD-Q)

General data base:

Name:

Age:

Occupation:

Address and contact number:

(Please tick yes/no given in the bracket as appropriate)

1. Do you have to hurry to empty your bladder? (yes/no)
2. Have you ever been unable to postpone your urination? (yes/no)
3. Do you unintentionally lose your urine? (yes/no)
4. Are there times when you don't make it to the bathroom and leak urine? (yes/no)
5. Do you lose urine when you:-
 - (a) Lift heavy objects. (yes/no)
 - (b) Sneeze/ coughing (yes/no)
 - (c) Routine activities (yes/no)
6. Are you unable to stop your stream while urinating (yes/no)
7. Do you feel that you have not completely emptied your bladder after urinating (yes/no)
8. Do you dribble urine after urinating? (yes/no)
9. Have you ever noticed pressure/heaviness/bulging in the lower pelvic region? (yes/no)
10. Have you ever noticed a bulge coming from the vagina while straining? (yes/no)
11. Have you ever noticed something coming out from anus during/after defecation? (yes/no)
12. Do you get constipation oftenly? (yes/no)
13. Are you ever incontinent of stool? (yes/no)
14. Have you ever been unable to control passing gas? (yes/no)
15. Have you ever used a special positions/ maneuver such as giving manual pressure over perineum/ vagina/ rectum to complete the bowel movements? (yes/no)
16. Does the fear of leaking urine/stool/bulging in the vagina cause you to avoid/restrict your sexual activity? (yes/no)
17. Have you ever passed gas through the vagina during the sexual intercourse? (yes/no)

CONCLUSION

Out of 150 women only 10 women were found to have no symptoms. This study shows that the women who are professionally educated are unaware of the pelvic floor dysfunction and its available treatment. Some neglected the symptoms; some were hesitant to approach the medical professional and some women thought it to be a natural process of ageing. This study emphasized on the awareness of pelvic floor dysfunction.

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AUTHORS CONTRIBUTION STATEMENT

Author G.Deepthi and P.Sankarakumaran investigate and supervise the project. Kishoremoy Das carried out the research. All the authors contributed to the final version of the manuscript.

CONFLICT OF INTEREST

Conflict of interest declared none.

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