

stract])) AND ((“Pelvic floor muscle training”[Title/Abstract]) OR (“Pelvic floor muscle activation”[Title/Abstract]) OR (“Pelvic floor muscle exercise”[Title/Abstract]) OR (“Pelvic floor muscle fatigue”[Title/Abstract])). The *Rayyan Online Platform* (<https://rayyan.qcri.org/>) was used by three independent reviewers to perform the study selection process. In case of discrepancies, the reviewers solved them by consensus. Figure 1 shows the process followed to obtain the final records included. The quality of the reviews and meta-analyses included in this umbrella review, was assessed using the *A MeaSurement Tool to Assess Systematic Reviews* (AMSTAR)².

Results: Four Systematic Reviews were included in this study³⁻⁶. The quality of the studies was high in one³, moderate in another⁴ and low in two^{5,6} (Table 1). The outcomes were divided, mainly into prevention and treatment (Table 2). Findings on prevention and treatment, with respect to primary outcomes, are variable depending on the period. In treatment, PFMT is shown to be effective antenatal and postnatal. It reduces the symptoms and the probability of suffering from IU. However, there is a lot of variability in the recommendations in the number of contractions, intensity and time of treatment of PFMT. Even so, it is indicated that it should be assimilated, as far as possible, to the usual muscle training. Whether the treatment is followed by a physiotherapist or another health professional does not influence the results. All participating women receive information once the clinical trial is completed. Some receive it in their usual treatment. Therefore, those in the control groups may have done pelvic floor activity. This will influence the long-term results. It will also influence whether women stop exercising.

Conclusions: In terms of prevention, the PMFT programmes during pregnancy appears to decrease the prevalence of UI up to six months after delivery. After the six-month postpartum, the information it is unclear whether this effect is positive. For woman with UI after delivery, the PMFT programmes is an effective treatment with a reduce of the prevalence of UI (the effects do no persist in long term). There is no sufficient evidence to say whether or not PMFT programmes are effective in the long term. Adverse effects from the PFMT programmes during pregnancy has not been reported.

Keywords: Pelvic Floor. Pelvic Floor Disorders. Pelvic floor muscle training. Urinary incontinence. Pregnancy. Postnatal period.

REFERENCES

1. Aromataris E, Fernandez R, Godfrey CM, Holly C, Khalil H, Tungpukom P. Summarizing systematic reviews: Methodological development, conduct and reporting of an umbrella review approach. *Int J Evid Based Healthc*. 2015;13(3):132-40.
2. Shea BJ, Reeves BC, Wells G, Thuku M, Hamel C, Moran J, et al. AMSTAR 2: A critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. *BMJ*. 2017;358.
3. Boyle R, Hay-Smith EJC, Cody JD, Mørkved S. Pelvic floor muscle training for prevention and treatment of urinary and faecal incontinence in antenatal and postnatal women. *Cochrane Database Syst Rev* [Internet]. 2012 Oct 17; Available from: <http://doi.wiley.com/10.1002/14651858.CD007471.pub2>
4. Davenport MH, Nagpal TS, Mottola MF, Skow RJ, Riske L, Poitras VJ, et al. Prenatal exercise (including but not limited to pelvic floor muscle training) and urinary incontinence during and following pregnancy: A systematic review and meta-analysis. *British Journal of Sports Medicine*. 2018;52:1397-404.
5. Schreiner L, Crivelatti I, de Oliveira JM, Nygaard CC, dos Santos TG. Systematic review of pelvic floor interventions during pregnancy. *International Journal of Gynecology and Obstetrics*. 2018;143:10-8.
6. Mørkved S, Bo K. 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*. 2014;48(4):299-310.

Oral communications

O1. EVALUATION OF THE IMPROVEMENT OF QUALITY OF LIFE IN PATIENTS WITH URINARY INCONTINENCE USING THE KING'S HEALTH QUESTIONNAIRE INSTRUMENT

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Objectives: To assess health-related quality of life (HRQoL) in women with urinary incontinence (UI) using the King's Health Questionnaire (KHQ) instrument.

Methods: Setting: 620-bed public hospital. Study period: 2019-2020. Preliminary prospective non-randomized study of 51 patients with stress UI (SUI), urgency (UUI) and mixed (UI) who met inclusion criteria and accepted their participation. Measuring instrument: KHQ. The intervention is carried out based on existing scientific evidence. CV of the patients is evaluated with the KHQ in temporary measurements: baseline and at the end of treatment. The analysis of the results was carried out using SPSS.

Results: 51 women meet inclusion criteria. Age 46 (26-75) years. 32 with IUE, 18 with IUM and 1 with IUU. Cross-tables measured the interaction of each of the nine dimensions of the KHQ at the beginning of the treatment versus the end of the intervention. With Pearson's chi-square statistic, we obtained a statistically significant association of improvement in perception of general health ($p < 0.001$) and eight QoL domains: incontinence impact ($p < 0.001$), role limitation ($p < 0.001$), physical limitation ($p < 0.001$), social limitation ($p < 0.001$), personal relationships ($p < 0.001$), emotions ($p < 0.001$), sleep/energy disturbances ($p < 0.001$), condition severity (frequency $p = 0.025$, nocturia $p < 0.001$, urgency $p = 0.03$). There is a significant correlation according to Kruskal Wallis tests when comparing RV leak involvement (ICIQ-SF) at the beginning ($p0 < 0.00$, $p1 < 0.001$), at the end of treatment ($p0 < 0.001$, $p1 < 0.001$) and at month of intervention ($p0 = 0.014$, $p1 = 0.006$) versus impact on life due to urinary problems (KHQ) both at baseline (0) and at the end of intervention (1).

Conclusions: Significant improvement in HRQL of women in dimensions: physical, psychological, sexual, work and social disturbed by UI at the end of the intervention.

Keywords: Urinary incontinence. Quality of life questionnaires. Female.

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O2. PHYCHOSOCIAL CONSEQUENCES OF ABDOMINAL DIASTASIS: BEYOND AESTHETICS

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Introduction: Diastasis recti (DR) is the abnormal widening of the distance between the two medial borders of rectus abdominis muscles. Though this condition can appear in both sexes, its prevalence is higher in women during pregnancy (33.1%) and postpartum (45.4% 6 months after delivery). Women with DR are more likely to suffer from reduced quality of life, lower body image satisfaction and higher degrees of abdominal pain. However, research on the impact of DR at a psychosocial level is scarce. The aim of this study was the analysis of the prevalence of DR symptoms and its effect at a psychological and social level in women.

Methods: A cross-sectional observational study was carried out in a group of adult parous Spanish-speaking women with DR. The participants completed a series of items from the questionnaires Roland Morris and Multidimensional Body-Self Relations Questionnaire-Appearance Scale through an online survey. Qualitative data about perception and experiences of women with diastasis was evaluated through two open questions.

Results: 319 women were included. 75.8% of them changed the way they dress since they have DR, 82.7% thought that their body is not attractive, 40.6% avoided looking themselves in the mirror because they felt disappointed by their image and 58.2% stopped going to the beach out of shame. In addition, 23.2% stated that they have reduced their social life since they have DR and 36.1% considered that their health is worse than other women. In addition, women with DR expressed feelings of abandonment by health institutions, shame, sadness, helplessness, lack of self-esteem, resignation, and social pressure.

Conclusions: DR has a negative impact on the psychosocial health in women. Psychosocial consequences of DR should be considered in the management of this condition. Future research should focus on the most appropriate treatments to improve these parameters.

Keywords: Diastasis recti. Psychosocial. Postpartum. Evaluation.

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03. STUDY OF IMPROVEMENT OF QUALITY OF LIFE BY EVALUATION OF THE ICIQ-SF IN PATIENTS WITH URINARY INCONTINENCE

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Objectives: To assess health-related quality of life (HRQoL) using the Incontinence Questionnaire Short Form (ICIQ-SF) instrument in women with urinary incontinence (UI)

Methods: Setting: 620-bed public hospital. Study period: 2019-2020. Preliminary prospective non-randomized study of 51 patients. Measurement instrument: ICIQ-SF. Evaluations: baseline, at the end of treatment and one month after their intervention. The intervention is carried out based on existing scientific evidence. The analysis was carried out using SPSS.

Results: 51 women meet inclusion criteria. Age 46 (26-75) years. 62.7% stress UI (SUI), 35.3% mixed (MUI). With the Wilcoxon statistic, total scores obtained were calculated, significantly improving final treatment-start ($Z = 6.23$), one month of intervention-baseline situation ($Z = 3.41$) and final treatment ($Z = 3.43$). They are more significant in SUI one month after finishing the intervention-baseline value ($Z = 2.20$) and the end of treatment ($Z = 2.21$) compared to a greater significant improvement in SUI at the end of treatment-beginning ($Z = 4.95$). Number of urine losses (1), quantity of said losses (2) and impact on daily life (DV) (3) significantly improve at the end of treatment-initiation ($Z1 = 6.21$, $Z2 = 5.79$, $Z3 = 6.01$), one month after completion- baseline value ($Z1 = 3.44$, $Z2 = 3.21$, $Z3 = 3.43$) and completion of intervention ($Z1 = 3.06$, $Z2 = 2.64$, $Z3 = 3.27$). Losses SUI and SUI improve significantly at the end-start month ($Z1E = 2.54$, $Z1M = 2.20$) being significantly higher in SUI at the end of treatment-initiation ($Z1 = 4.87$). The amount as well as the involvement of RV in SUI significantly improved in the three assessments ($Z2 = 4.41$, $Z3 = 4.73$, $Z2 = 2.46$, $Z3 = 2.53$, $Z2 = 2.23$, $Z3 = 2.46$).

Conclusions: Significant improvement in QoL in patients with UI after intervention, which is maintained over time.

Keywords: Urinary incontinence. Quality of life questionnaires. Health-related quality of life. Female.

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04. INFLUENCE OF CROSSFIT PRACTICE ON THE APPEARANCE OF URINARY INCONTINENCE IN WOMEN. BIBLIOGRAPHIC REVIEW

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Introduction: Urinary incontinence, defined as the involuntary leakage of urine, is often considered a disorder of postpartum or postmenopausal women. However, recent research has demonstrated a high prevalence of urinary incontinence in young athletes engaged in high-impact sports.

Objectives: To know if the practice of CrossFit in women causes the appearance of urinary incontinence.

Methods: A bibliographic search was carried out on the PubMed and Web Of Science databases, between April and May 2020.

Results: 8 scientific articles have been selected for our study that meet the inclusion and exclusion criteria.

Conclusions: CrossFit is a high stress on the female pelvic floor muscles and can cause alterations and urinary incontinence. In addition, previous childbirth and weight increase its prevalence. Double jumping, squatting and lifting are the exercises that cause most urinary incontinence.

Keywords: Urinary Incontinence. CrossFit. Pelvic Floor. Jump. Running and Powerlifters.

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05. PELVIC FLOOR MUSCULAR TRAINING AS A PHYSIOTHERAPEUTIC TREATMENT IN PELVIC ORGAN PROLAPSE: A BIBLIOGRAPHIC REVIEW

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Introduction: The pelvic organs prolapse (POP) is a pathology with a highest prevalence rate within women, that reverberates in different aspects of social and private life. Different treatment options were found for this dysfunction, like the pelvic floor muscle training (PFMT).

Objectives: To get to know, according to the scientific literature of the past five years, how does the PFMT affect as a physiotherapeutic treatment to the pelvic floor (PF) muscular strength, the quality of life and the urogynecological symptoms in women with POP.

Methods: The bibliography published in PubMed, PEDro, and Cochrane has been revised between February and March of 2019.

Results: 13 clinical trials were incorporated to the review, where only 3 of them use exclusively the PFMT in the POP, 5 of them compare the PFMT with other therapies, 2 of them combine the PFMT with other therapies, 1 of them uses the PFMT within postmenopausal and 2 of them use it in the postpartum.

Conclusions: Regarding to the muscular strength of the PF, the administration of PFMT supposes the increase of the muscles' strength and resistance, that could end up in an improvement of the impact in the different stages of the POP. As for the urogynecological symptoms and the quality of life, the administration of PFMT improves both parameters but it doesn't reach the clinic relevance it needs.

Keywords: Pelvic floor muscles. Pelvic organs prolapse. Pelvic floor muscle training. Pessaries.

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06. POSTPARTUM WOMEN: URINARY INCONTINENCE, AND SEXUAL FUNCTION AFTER TRAINING WITH HYPOPRESSIVE ABDOMINAL EXERCISES. A PILOT RANDOMIZED STUDY

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Introduction: At early postpartum, up to 58% women present some pelvic floor (PF) dysfunction (Kolberg Tennfjord et al., 2015). This PF dysfunction leads to urinary incontinence (UI) (Soriano et al., 2020) and/or low sexual function (SF) (Kolberg Tennfjord et al., 2015), which affects to their quality of life. Hypopressive abdominal exercise has been recommended by recent literature for women at early postpartum period (Juez et al., 2019).

Objectives: The aim of the present study was to investigate the effect of a hypopressive abdominal exercise program (HAEP) in terms of PF function and SF symptoms in early postpartum women.

Methods: Fifty-four early postpartum women (6-8 weeks after childbirth), mean age 33.39 ± 3.82 years old, participated at the study. Participants were randomized in two groups: intervention group performing HAEP (HAEPG, $n = 28$) and control group (CG, $n = 26$). The HAEPG performed 18 sessions of 30 minutes involving hypopressive abdominal exercises; the CG conducted a guided conventional non-specific functional program. Both programs were performed 3 days/week. Data related with UI and SF were collected by two questionnaires: Female Sexual Function Index 6 items (FSFI-6) and Incontinence Questionnaire- Urinary Incontinence Short Form (ICIQ-UI-SF), being completed by the participants at two moments, just before the intervention (pre-intervention) and after the programs (post-intervention).

Results: It has not been found statistically differences comparing both groups in UI neither pre intervention nor post intervention. However, SF showed better results post-intervention ($p = 0.044$) at the CG. Within groups, significant differences ($p < 0.05$) were observed, obtaining better results in UI at HAEPG and better results in SF at CG.

Conclusions: Performing a HAEP or conventional program, has shown similar results in SF and UI in postpartum women. In that sense although hypopressive exercise is recommended in the area, more investigation is needed to find the best exercise to improve PF function.

Keywords: Postnatal women. Training. Postpartum problems. Low pressure abdominal program. Postnatal pelvic floor disorders.

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07. EVALUATION OF SEXUAL FUNCTION IN PATIENTS WITH PELVIC FLOOR DISORDERS

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Introduction: Pelvic floor pathology is a disorder that affects a third of the adult female population, including many clinical conditions, such as urinary and faecal incontinence, pelvic organ prolapses, alterations in perception or filling of the lower urinary tract, defecatory and sexual disorders and numerous chronic pain syndromes in the perineal area. Within this wide variety of problems, the most frequent affect women 3 to 7 times more than men. That is why it is necessary to evaluate pelvic floor pathology with objective tools that guide professionals.

Objectives: To review the validated questionnaires in Spanish on sexual function in patients with pelvic floor disorders and, on the other hand, to analyse their psychometric properties.

Methods: A systematic review of the literature was carried out in the PUBMED, WOS and CINAHL databases. All articles published up to November 23, 2020, were considered. The keywords used were: "Pelvic floor" and "validation", combined with the Boolean operator "AND". The selected studies fulfilled the determined selection criteria and the methodological quality of each of them was evaluated with the COSMIN scale.

Results and conclusions: A total of 1,081 articles were identified, of which 3 were included for the evaluation of sexual function in patients with pelvic floor dysfunctions. The evaluated question-

naires, the structural characteristics, and psychometric properties of each of them were collected, analysing the results provided. It was concluded that the validation process for the Spanish language has been as rigorous as possible and complies with homogeneous standards. Good cultural and linguistic adaptation make the questionnaires comparable to each other to be used in higher evaluations such as reviews and meta-analysis.

Keywords: Pelvic floor dysfunction. Validation study. Questionnaire. Spanish. Sexual function.

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08. EVALUATION OF THE QUALITY OF LIFE IN PATIENTS WITH PELVIC FLOOR DYSFUNCTION

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Introduction: Pelvic floor pathology is a disorder that affects a third of the female population. This term includes many clinical conditions that affect the day-to-day life of women. These conditions can be evaluated using tools as psychometric questionnaires that inform us of the status and perception of women's health in an objective and subjective way. Most of these questionnaires are in English, but there are also versions translated and validated into Spanish, for they use in research and clinical practice by Spanish-speaking healthcare workers.

Objectives: To review the validated questionnaires in Spanish on the quality of life in patients with pelvic floor dysfunctions and, on the other hand, analyse their psychometric properties.

Methods: A systematic review of the scientific literature was carried out in the PUBMED, WOS and CINAHL databases. All articles published up to November 23rd, 2020, were considered. The keywords used were "Pelvic floor" and "validation", combined with the Boolean operator "AND". The selected studies fulfilled the determined selection criteria and the methodological quality of each of them was evaluated with the COSMIN scale.

Results and conclusions: A total of 1,081 articles were identified, of which 6 were included. The evaluated questionnaires, the structural characteristics, and psychometric properties of each of them were collected, and the results provided were analysed. It was possible to conclude that the Spanish versions of the questionnaires show good basic structural and psychometric characteristics for the evaluation of the quality of life in patients with disorders and pathologies of the pelvic floor. Spanish clinicians have different instruments with psychometric characteristics that, as a rule, resemble other versions of the same questionnaire published in other languages.

Keywords: Pelvic floor. Dysfunction. Cross cultural validation. Spanish.

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09. EFFECTIVENESS OF POSTPARTUM TELEREHABILITATION PROGRAM TO PREVENT URINARY INCONTINENCE IN A GROUP OF YOUNG WOMEN: A PILOT STUDY

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Objectives: We proposed a telerehabilitation approach of pelvic floor muscles training using an video-biofeedback technique in real-

time that can lead patients to improve their pelvic floor muscles and prevent urinary incontinence (UI).

Methods: This pilot study was a randomized controlled trial of telerehabilitation pelvic floor muscle training versus conventional pelvic floor exercises. Sixteen young women between 18 and 32 years of age, were randomly assigned to an experimental group ($n = 8$) or a control group ($n = 8$). The experimental group received a protocol of telerehabilitation pelvic floor muscle training for 3 months, 2 virtual sessions weekly. The experimental device we used consisted of a vaginal probe that wirelessly transmitted (bluetooth) variations of pressure. The software allowed the patient and the therapist to visualize the correct execution or not of the exercise. The control group received conventional pelvic floor exercises during the same period in a physical therapy center. The interventions, starting at 6 weeks postpartum. Outcome measures (baseline and 3 months), maximal voluntary contraction (MVC) and endurance were measured with a perionometer. Self-reported symptoms of UI was registered through the International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form. Additional follow-up was conducted at 12 months postpartum.

Results: Baseline characteristics were similar in both groups. The change in perineometry values at baseline and after the intervention was significant in the experimental group (22.12 to 30.20, $p = .02$). At the follow-up visit, 12 months postpartum, no differences were observed between the groups regarding rates of UI. Pelvic floor muscle strength and endurance favoring the intervention group were maintained. Pelvic floor muscle strength changes at endpoint was 4 hPa (95%CI 2-7; $p = 0.01$), and for endurance changes, 35 hPa/sec (95%CI 21-68; $p = 0.04$), both in favor of the intervention.

Conclusions: Postpartum telerehabilitation pelvic floor muscle training decreased the rate of urinary incontinence and related discomfort 6 months and increased muscle strength and endurance.

Keywords: Pelvic floor muscle training. Postpartum. Telerehabilitation. Biofeedback. Urinary incontinence. Physical therapy.

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Posters

P1. TRANSLATION AND CROSS-CULTURAL ADAPTATION OF THE PRAFAB QUESTIONNAIRE INTO SPANISH LANGUAGE

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Introduction: Urinary incontinence affects different aspects such as social, physical, psychological, occupational or sexual functioning and so involve a great impact on women's quality of life. The PRAFAB questionnaire (PProtection, Amount, Frequency, Adjustment of behavior and Body image) is highly recommended by the International Continence Society (A grade) for the evaluation of urine leakage and its effect on women's quality of life.

Objectives: To conduct a translation and cross-culturally adaptation of the PRAFAB questionnaire into Spanish language.

Methods: After receiving copyright permission from the original author to adapt the PRAFAB questionnaire, it was translated into Spanish language following the translation-back-translation method in two phases: Phase I. The aim was to obtain a semantic, conceptual, idiomatic and content equivalence. First, it was carried the forward translation of PRAFAB into Spanish by two transla-

tors (native Spanish-speaking) and after the synthesized version was back-translated by two translators (native Dutch-speaking). With the back-translated and translated versions, an Expert Committee agreed the preliminary Spanish PRAFAB. Phase II. The aim was to analyze the comprehensibility of preliminary PRAFAB Spanish version. The preliminary Spanish version was administered to 30 native Spanish-speaking women. Women self-filled in the questionnaire, and after they were interviewed face-to-face. Finally, the final Spanish PRAFAB was obtained.

Results: The translation and back-translation method guaranteed the correct translation of the questionnaire. The items were well understood by women. No words or items showed difficulty in their comprehensibility and did not need to be adapted to the Spanish culture, all women found the questionnaire easy to understand and relevant. The final version of the Spanish PRAFAB maintains the structure of the original version.

Conclusions: The linguistic and cross-cultural adaptation of PRAFAB Spanish version achieved a good semantic, conceptual, idiomatic and content equivalence to original version, and showed understandable by women.

Keywords: Urinary incontinence. Women. Adaptation. Equivalence. Questionnaire. PRAFAB.

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P2. SYMPTOMS OF PELVIC FLOOR DYSFUNCTION AND ABDOMINAL MUSCLE FUNCTION ASSESSMENT DURING FIRST POSTPARTUM PERIOD: A LONGITUDINAL STUDY

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Objectives: To describe the differences in muscle thickness and neuromuscular activity of the abdominal muscles during abdominopelvic maneuvers in women during first 18 postpartum months.

Methods: Design: longitudinal descriptive study with a comparator group. Participants: 65 primiparous postpartum (PP) and 65 nulliparous and nulligest (NP) women. Interventions: demographic and clinical data were collected, including age, body mass index, physical activity and constipation. All women were asked to complete the symptoms of pelvic floor disorders (Pelvic Floor Distress Inventory Short Form (PFDI-20)) and of pelvic floor disorders related symptoms on quality of life (Pelvic Floor Impact Questionnaire Short Form (PFIQ-7)) questionnaires. Abdominal muscles and pelvic floor muscles (PFM) activation were measured using B-mode and M-mode ultrasound imaging and surface electromyography in supine position. PFM displacement was assessed at rest and during a semi curl-up, an abdominal draw-in maneuver, and a PFM contraction. PP women performed four assessments at 6-8 weeks (A0), 3-4 months (A1), 10-12 months (A2) and 16-18 months (A3) after childbirth. In the NP group a single visit was carried out.

Results: PP women have higher scores on the questionnaire even if 9.23% of NP women reported urinary incontinence symptoms. Abdominal muscles thicknesses at rest at PP A0 was smaller than NP thickness (RA $p = 0.000$, OE $p = 0.019$ and OI $p = 0.000$). RA thickness in PP increased during A1, A2 and A3 but remained smaller than NP ($p = 0.000$). In the first assessment A0, PP showed higher electromyographic activity of the RA and lower activity of the lateral abdominal muscles and the PFM than NP ($p = 0.000$). Up to 40% of PP at A0 produced 0.49 cm caudal displacement. In NP women 35.4% also showed caudal displacement, although in these only 0.28 cm. Conclusion: PP women show differences in abdominal muscle thickness, neuromuscular activity and PFM displacement compared to NP.

Keywords: Abdominal muscles. Postpartum period. Ultrasonography. Electromyography. Pelvic floor.

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