

# Prevention of urinary incontinence in the puerperium

Prevenção da incontinência urinária no puerpério

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#### ABSTRACT

This article aims to analyze the available literature on the prevention of urinary incontinence in the puerperal pregnancy cycle and the role of the nurse in the diagnosis, evaluation and effective support to the patient. It is an integrative review of the literature, carried out between January and February 2018. The articles search was carried out in the electronic databases LILACS, MEDLINE and PUBMED through the Descriptors in Health Sciences (DeCs): Nursing, Urinary Incontinence and Puerperium, and Medical Subject Headings (MeSH): Nursing, Urinary Incontinence and Post Partum Period, these being integrated through the boolean operator "and". The 17 studies, being grouped in thematic categories: Pelvic floor muscle strength in the prevention of urinary incontinence; Risk factors for urinary incontinence; Relation between urinary incontinence and birth tract; Therapeutics used in pregnant and puerperal women with urinary incontinence. It is concluded that the nurse plays a fundamental role in the evaluation, diagnosis, treatment and prevention of urinary incontinence; Pregnancy cycle, and also serves as an effective support to the patient. **Keywords:** Urinary incontinence; Pregnancy; Childbirth; Puerperium; Women's Health.

#### **RESUMO**

Este artigo objetiva analisar a literatura disponível sobre a prevenção da incontinência urinária no ciclo gravídico puerperal e o papel do enfermeiro quanto ao diagnóstico, avaliação e suporte eficaz a paciente. Trata-se de uma revisão integrativa da literatura, realizada entre os meses de janeiro e fevereiro de 2018. A busca dos artigos foi realizada nas bases de dados eletrônicas LILACS, MEDLINE e PUBMED por meio dos Descritores em Ciências da Saúde (DeCs): Enfermagem, Incontinência Urinária e Puerpério, e Medical Subject Headings (MeSH): Nursing, Urinary Incontinence e Post Partum Period, sendo estes integrados através do operador booleano "and". Os 17 estudos, sendo agrupados em categorias temáticas: Força muscular do assoalho pélvico na prevenção da incontinência urinária; Fatores de risco para incontinência urinária; Relação entre incontinência urinária e vias de parto; Terapêuticas utilizadas em gestantes e puérperas com incontinência urinária. Conclui-se que o enfermeiro tem um papel fundamental na avaliação, diagnóstico, tratamento e prevenção da incontinência urinária no ciclo gravídico puerperal, servindo, inclusive, de suporte eficaz à paciente. **Palavras-chave:** Incontinência Urinária; Gravidez; Parto; Puerpério; Saúde da Mulher.

#### ΝΟΤΑ

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#### INTRODUCTION

Urinary incontinence is defined by the International Continence Society (ICS) as reporting any involuntary loss of urine<sup>(1)</sup>. It is classified into three types, the most common being Urinary Incontinence of Stress (SUI), which refers to loss of urine due to exercise or, secondarily, when sneezing or coughing, and Urinary Urinary Incontinence (IUM), when loss occurs after the strong and sudden sensation of urination<sup>(2)</sup>.

Women are more affected by urinary incontinence, having as their main factor the anatomy of the urinary system - because it is internal - that makes it more susceptible to problems related to excretion, as well as exclusive life events unique to women, such as childbirth and puerperium<sup>(3)</sup>.

Urinary incontinence manifests for the first time during pregnancy, reaching 23% to 50% of women4. During the puerperium, urinary incontinence may also be present, being referred to as a hygienic problem, which significantly interferes with work in the social and sexual life of women, and may negatively affect health quality of life <sup>(5)</sup>.

It is worth noting that the puerperium is the period that starts from the release of the organism to the pre-delivery conditions. In general, it lasts from six to eight weeks, with variability in duration, according to each woman<sup>(6)</sup>.

This variation is related, in particular, to anatomical and physiological changes in the organism, although psychosocial issues such as motherhood, sexuality, self-esteem, and personal and family life reorganization are occurring concomitantly and may directly influence the passage through this period<sup>(7)</sup>.

In this sense, the Operational Standard for Health Care (NOAS) establishes for municipalities the guarantee of basic minimum actions, such as from prenatal to puerperium, among other assistance aimed at women<sup>(8)</sup>. In view of the above, IU is still a problem not widely reported, both within the health area and in the media in general. According to the National Institutes of Health Consensus Development Conference<sup>(9)</sup>, many women have the symptoms, but few know that most of them are treatable and can reach a cure.

As the nurse plays a fundamental role within a multiprofessional team, it is up to this professional to transmit confidence and work the motivation of their patients in a humanized and individualized way, adding knowledge about the voiding disorders, aiding in a quick and precise clinical evaluation, that many women do not report urinary loss because they find it normal and fleeting<sup>(10)</sup>.

In view of this context, the following question emerges: What is the national and international scientific production regarding the prevention of urinary incontinence in puerperal women? Thus, the present study aims to analyze the available literature on the prevention of urinary incontinence in the puerperal pregnancy cycle and the role of nurses in the diagnosis, evaluation and effective support to the patient.

### METHOD

The study was an integrative review of the literature, carried out between January and February 2018. The following steps were followed for its development: identification of the problem and definition of the relevant hypothesis or issue; establishment of criteria for inclusion and exclusion of studies; definition of the information to be extracted from the selected studies; evaluation of included publications; interpretation and presentation of the synthesis of knowledge<sup>(11)</sup>.

The search for the articles was done in the electronic databases US National Library of Medicine (PubMed), Latin American and Caribbean Literature in Health Sciences (LILACS) and MEDLINE, the Descriptors in Health Sciences (DeCs) were used: Nursing , Urinary Incontinence and Puerperium, and Medical Subject Headings (MeSH): Nursing, Urinary Incontinence and Post Partum Period, these being integrated through the boolean operator "and".

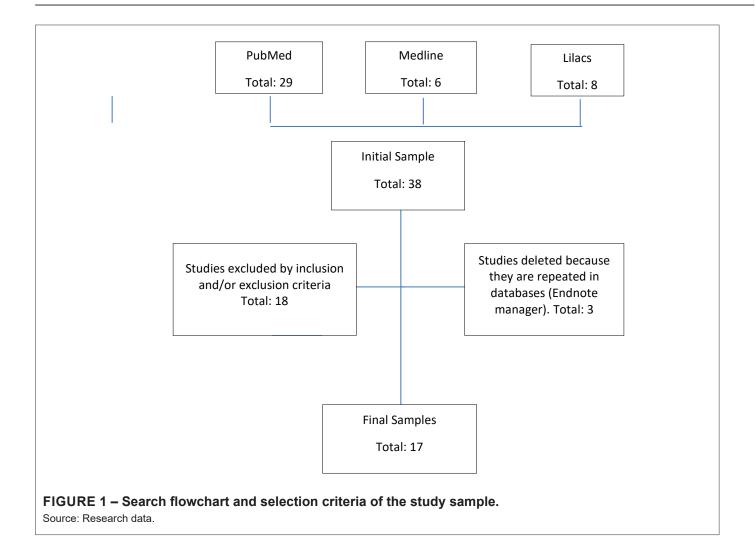
The inclusion criteria were: articles in the Portuguese, English or Spanish languages that were published between 2013 and 2017. Articles that were not fully available in the databases that did not respond to the guiding question or that did not fall within the proposed review objective were excluded.

The articles were selected and, from the complete reading, grouped into analysis categories according to the content and forwarded to the EndNote reference manager. We used a data collection instrument that included information considered relevant to the study, such as: title, authorship, year, periodical, country of origin, type of study, objective and outcome.

After completing all the stages of the integrative review proposed by Mendes, Silveira and Galvão<sup>(11)</sup>, 17 articles were found (Figure 1).

#### RESULTS

The 17 studies found have different contexts addressing urinary incontinence in the puerperium. The muscular strength of the pelvic floor and the risk factors for urinary incontinence were approached in the same proportion, that is, five studies for each theme. Only one article focused on women's knowledge of the symptoms of urinary incontinence in the puerperium. Two systematic reviews were found, one emphasizing the importance of addressing the physical, psychological, social and somatic health of women and babies in the postpartum period and the second, the treatment of urinary incontinence



# TABLE 1 – Demonstration of articles related to urinary incontinence in the puerperium according to authorship, title, period, year, country, objective, type of study and results in the period from 2013 to 2017

Authors	Title of the Article	Periodical / year / Database	Country	Goal	Type of study	Results
Zlizzi PT, Trevisan KF, Leister N, Cruz CS, Riesco MLG.	Perineal muscle strength and urinary and anal incontinence in women after the door.	Rev Esc Enferm USP.2017;51:e03214	Brazil	To analyze pelvic floor muscle strength (PFMS) and urinary and anal incontinence (IU and AI) in the postpartum period.	Cross-sectional study	The vaginal delivery predisposes to the reduction of PFMS and the cesarean section had a protective effect for its reduction.
Mendes EPB, Oliveira SMJV, Caroci <i>et al.</i>	Pelvic floor muscle strength in primiparous women according to type of delivery: cross- sectional study <sup>1</sup>	Rev. Latino-Am. Enfermagem 2016;24:e2758	Brazil	To compare pelvic floor muscle strength in primiparous women in normal postpartum and cesarean sections.	Cross-sectional study	The muscular strength of the pelvic floor does not differ between primiparous as to the type of delivery. Normal postpartum women with higher schooling who performed perineal exercise during pregnancy had greater muscle strength.
Leroy LS, Lúcio A, Lopes MHBM.	Risk factors for urinary incontinence in the puerperium	Rev Esc Enferm USP.2016;50(2):200- 207.	Brazil	To investigate the risk factors for postpartum urinary incontinence (IU) and its characteristics.	Case study	Most of the time, UI appeared through pregnancy and remained through the postpartum period. Urinary incontinence during pregnancy, multiparity, gestational age at birth greater than or equal to 37 weeks, and constipation was presented as risk factors

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Wagg AR, Kendall, S, Bunn F.	Women's experiences, beliefs and knowledge of urinary symptoms in the postpartum period and the perceptions of health professionals.	Primary Health Care Research & Development 2017; 18: 448–462	Cambridge, United Kingdom	This study aimed to explore, describe and improve the understanding of women's experiences, beliefs and knowledge of urinary symptoms in the postpartum period.	Qualitative inductive	They have revealed that sometimes poor communication, lack of education, and the power of relative histories of the past have been barriers to seeking help. Health professionals reported lack of time and knowledge and were not sure of the effect of the pelvic floor.
Senat a MV,Sen- tilhesL,Battut A, <i>et al.</i>	Postpartum practice: guidelines for clinical practice from the French College of Gynaecologists and Obstetricians (CNGOF)	European Journal of Obstetrics & Gynecology and Reproductive Biology 202 (2016) 1–8	France	Make evidence-based recommendations for postpartum management of women and their newborns, regardless of mode of delivery.	Systematic review	The postpartum period presents clinicians with a unique and privileged opportunity to address the physical, psychological, social, and somatic health of women and babies.
Senat a MV,Sen- tilhesL,Battut A, <i>et al.</i>	Postpartum: Recommendations for Clinical Practice - Short Text	Journal de Gynecologie ´ Obstetrique ´ etBiologie de laReproduction (2015) 44, 1157—1166	France	To determine the management of postpartum women and newborns, who delivered either vaginally or by caesarean section.	Database Query	Postpartum is a unique and privileged opportunity for clinicians to address the physical, psychic and social health of women and their children.
Hutton EK, Hannah ME, Ross S, <i>et al.</i>	Maternal outcomes at 3 months after planned caesarean section versus planned vaginal birth for twin pregnancies in the Twin Birth Study: a randomised controlled trial	General Obstetrics Accepted 1 July 2015. Published online 20 August 2015	Canada	Compare results at 3 months postpartum for women randomized to deliver cesarean section (CS) or planned vaginal delivery (BV) in the TwinBirth (TBS) study.	Quali- Quantitative	We found no clinically important differences between groups in any outcome. The rate of problem urinary incontinence was 5.5% versus 6.4% (P = 0.31); and the mean incontinence questionnaire-7 score was 20.5 vs. 20.4 (P = 0.99)
Lipschuetz M, Cohen SM, Wischnitzer ML, et al.	Degree of bother from pelvic floor dysfunction in women one year after first delivery	European Journal of Obstetrics & Gynecology and Reproductive Biology 191 (2015) 90–94	Israel	To investigate and evaluate the complaints of pelvic floor dysfunction, anterior and posterior compartments and sexual function, in an unselected population of primiparous women.	Cross-sectional study	Two-thirds of primiparous women in PDF symptoms cause some degree of discomfort. When asked, women are willing to discuss the function of the pelvic floor.
Mannion CA, Vinturache AE, McDonald SM, Tough SC.	The Influence of Back Pain and Urinary Incontinence on Daily Tasks of Mothers at 12 Months Postpartum	PLOS ONE   DOI:10.1371/journal. pone.0129615 June 17, 2015	Canada	The present study examined the impact of back pain (BP) and / or urinary incontinence (IU) and the ability to perform daily tasks at 12 months postpartum.	Qualitative	Back pain and urinary incontinence are common occurrences 1 year after childbirth. Maternal performance from day to day. The tasks and health and quality of life of women are more often than due to BP than to UI.
Sut HK; Kaplan P B.	Effect of Pelvic Floor Muscle Exercise on Pelvic Floor Muscle Activity and [] <i>Continua.</i>	NeurourologyandUro- dynamics35:417–422 (2016)	Turkey	The purpose of this study is to investigate the effects of post-partum pelvic floor muscle exercise on pelvic floor muscle activity and leakage functions.	Quali- Quantitative	Pregnancy and parturition of pelvic floor muscle strength, urinary symptoms, quality of life and cancellation functions.
Brincat B; Crosby E; Mcleod A; FennerDee E.	Experiences during the first four years of a postpartum perineal clinic in the USA	International Journal of Gynecology and Obstetrics 128 (2015) 68–71	USA	To evaluate the characteristics of patients seen in a postpartum perineal clinic in the USA during the first 4 years of life and to identify factors that contribute to the success of the clinic.	Qualitative	The postpartum perineal clinic is sustainable. Dysfunction of the pelvic floor after a complicated vaginal delivery.

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HernandezRRV; Aznar CT; Aranda ER.	Factors Associated With Treatment- Seeking Behavior for Postpartum Urinary Incontinence	Journal of Nursing Scholarship, 2014; 46:6, 391–397.	Spain	To identify the factors associated with treatment seeking behavior for urinary incontinence (IU) among postpartum women.	Cross-sectional study	Lack of counseling seeking treatment among Spanish mothers. Clinical relevance: Nursing advice during pregnancy substantially to increase the number of women treated for postpartum UI.
Bussara Sangsawang	Risk factors for the development of stress urinary incontinence during pregnancy in primigravidae: a review of the literature	European Journal of Obstetrics & Gynecology and Reproductive Biology 178 (2014) 27–34	Thailand	The objective of this review is to identify the risk factors and development of SUI in pregnant women.	Literature review	Prevention of SUI during pregnancy may also reduce the incidence of stress urinary incontinence during the postpartum period.
Yoshida K; Murayama R; Haruna M, <i>et al.</i>	Longitudinal comparison study of pelvic floor function between women with and without stress urinary incontinence after vaginal delivery	J Med Ultrasonics (2013) 40:125-131	Japan	To compare the function of the pelvic floor between women with and without stress urinary incontinence after vaginal delivery.	Estudo longitudinal	Extended pelvic floor may be a cause of postpartum urinary incontinence. Therefore, treatment to improve the pelvic floor should be developed for the prevention of urinary stress incontinence.
BussaraSang- sawang&Nucha- reeSangsawang	Stress urinary incontinence in pregnant women: a review of prevalence, pathophysiology, and treatment	Int Urogynecol J (2013) 24: 901-912 DOI 10.1007 / s00192-013-2061-7	Thailand	To verify the prevalence of stress urinary incontinence during pregnancy.	Literature review	Pelvic floor muscle exercise is an effective treatment for stress urinary incontinence has no significant adverse effects.
Hernandez RRV; Aznar CT; Aranda	Urinary incontinence and weight changes during pregnancy and postpartum: A pending challenge	Midwifery 29 (2013) e123–e129	Spain	To analyze the association between urinary incontinence and maternal weight, and its variations in pregnancy and postpartum.	Observational study	High BMI and weight retention at six months postpartum increase the risk of incontinence, postpartum decreases the risk of urinary incontinence, even if others.
Claudia Oblasser, Janice Christie & Christine McCourt	Vaginal cones or balls to improve pelvic floor muscle performance and urinary continence in women postpartum: a quantitative systematic review and meta-analysis protocol	Journal of Advanced Nursing 71(4), 933– 941. doi: 10.1111/ jan.12566	England	To identify, critically evaluate and synthesize the best current evidence the use of vaginal cones or balls to improve urinary continence in postpartum women.	Quantitative systematic review with potential meta- analysis.	The innovative aspect is the knowledge, the vaginal use in the postpartum period, with performance and urinary continence as the primary results to estimate the effectiveness of its use.

with non-pharmacological methods. Three studies presented the treatment theme in general. Three other studies focused on the relationship between urinary incontinence and delivery routes.

We found 14 international publications from different countries and were grouped into thematic categories: Pelvic floor muscle strength in the prevention of urinary incontinence; Risk factors for urinary incontinence; Relation between urinary incontinence and birth tract; Therapeutics used in pregnant and puerperal women with urinary incontinence.

### DISCUSSION

## Pelvic floor muscle strength in urinary incontinence prevention

Three literature review articles focusing on the Pelvic Floor Muscle Force (PFMF) and Urinary Incontinence (UI) with different qualitative and quantitative approaches, as well as crosses related to the risks and birth pathways, were used to discuss this thematic category, which are other thematic categories demonstrating their correlation.

Although it is a secondary objective of the study by Mendes et al. 12, the table below shows the comparative figures on FMAP in primiparous women who presented UI during pregnancy immediately, and those who presented two months after giving birth.

According to the averages presented by Mendes et al.<sup>(12)</sup>, there is no evidence of the relationship between FMAP and UI variation during pregnancy and soon after delivery. Among the women with UI who performed normal delivery, the FMAP in gestation is on average 5.5 cmH<sup>2</sup>O lower in incontinent women, while those submitted to cesarean section, the positive variation is 2.7 cmH<sup>2</sup>O.

The numbers collected after childbirth put the

# TABLE 1 – Average muscle strength of the pelvic floor according to the type of delivery, according to sociodemographic characteristics, nutritional status, UI, dyspareunia, perineal exercise, perineum conditions and weight of the newborn. Itapecerica da Serra, SP, Brazil, 2014.

## Tabela 1 - continuação

	FMAP* (cmH2O)				
Variável	Parto normal		Cesariana		– p-valor
	n	Média (dp⁺)	n	Média (dp)	-
U <sup>∥</sup> na gestação					0,296‡
Sim	67	19,9 (20,1)	14	27,0 (14,9)	
Não	29	25,4 (14,5)	10	24,3 (15,0)	
U logo após o parto					0,894‡
Sim	59	22,4 (20,8)	20	25,0 (14,4)	
Não	13	24,3 (15,2)	4	25,5 (15,1)	
J que persiste por 2 meses de pós-parto n=17)					0,448‡
Sim	6	12,2 (9,9)	3	21,9 -	
Não	7	34,4 (24,5)	1	26,0 (17,5)	

Source: Mendes et al.(12)

correlation to the ground, since the average of the incontinents who performed normal birth increased by 2.5 cmH<sup>2</sup>O. It was only in the incontinent women group, after two months postpartum, that the numbers showed a considerably lower strength, on average 22.2 and 4.1 cmH2O of normal delivery and cesarean section, respectively.

The research by Zizzi et al.<sup>(13)</sup>, despite working with the FMAP and UI variables, showed that the odds of women developing UTI after childbirth were 20 times higher among women who presented it during pregnancy<sup>(13)</sup>.

The study "Longitudinal comparison study of pelvic floor function among women with and without stress urinary incontinence" by Yoshida et al.<sup>(14)</sup>, correlate the extended pelvic floor and urinary incontinence. Data were collected from seventeen women, periodically after six weeks, three months and six months postpartum vaginally, assessing the diameter of the anteroposterior diameter (antero-posterior diameter of the levator hiatus) at rest.

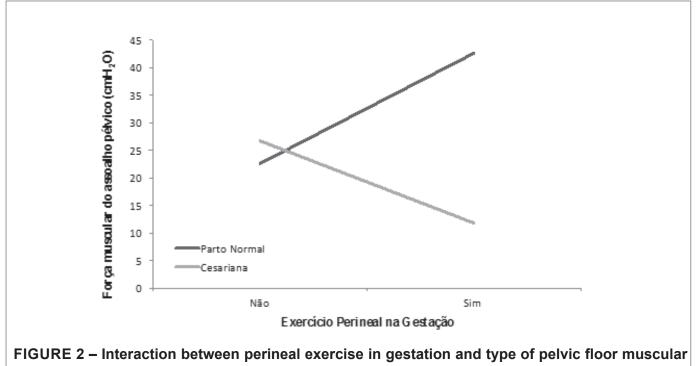
Among the seventeen women, five presented UI, and in the first sample six weeks after delivery, it was not possible to relate the diameter of the anteroposterior to UI. The study showed that "decreased pelvic floor support function may be one of the main causes of early postpartum stress incontinence" and "that incontinent women have such a capacity to recover pelvic floor support function after delivery, as the continent women", Yoshida et al. <sup>(14)</sup>.

According to the aforementioned studies, there is a correlation between normal childbirth and lower childbirth, and the latter related to UI, but the study by Mendes et al. <sup>(12)</sup>, shows that primiparous women who underwent perineal exercise during pregnancy and had childbirth normal, presented significantly higher values of FMAP compared to women of cesarean section, thus demonstrating the feasibility of UI prevention through perineal exercise in pregnancy, as shown in Figure 2.

#### **Risk Factors for Urinary Incontinence**

Although urinary incontinence is a significant problem in the puerperium, few studies are available to investigate the risk factors for the development of urinary incontinence. In agreement with Leroy, Lucio and Lopes<sup>(15)</sup>, the pathophysiology of UI in pregnancy and puerperium is multifactorial and involves pregnancy itself, hormonal changes, changes in the urethrovesical angle, anatomical damage after childbirth, and dynamic forces involving the muscular and connective tissues.

In its sampling, it was evidenced that urinary incontinence began frequently in gestation and remained in the puerperium. Presence of UI during gestation, multiparity, constipation and gestational age greater than or equal to 37 weeks at birth were risk factors for puerperal UI.



strength (FMAP). Itapecerica da Serra, SP, Brazil, 2014

Source: Mendes et al.12.

In addition to pregnancy, Sangsawang <sup>(16-17)</sup> explains the different risk factors for urinary incontinence that other authors do not address, such as smoking, since carbon monoxide impairs the oxygen transported to the body., resulting in atrophy of the pelvic floor musculature.

It is imperative to emphasize not only the risk factors for the development of UI, as well as the risk factors that an UI may entail. The Soares et al <sup>(18)</sup> study highlighted the development of dermatitis, being classified as Incontinence-Associated Dermatitis (ICD), in patients with UI and emphasized the importance of the nurse in establishing a care plan indicating the use of barrier cream in the prevention and treatment of AID.

There is evidence that evidence of increased weight at increased risk of developing urinary incontinence during pregnancy and postpartum is believed to increase body weight acts on the pelvic tissue, causing tension, stretching and weakening of the muscles, nerves and fascias of the floor excess pelvic weight could lead to dysfunction in the innervation of the bladder affecting the pudendal nerve<sup>(19)</sup>.

# Relation between urinary incontinence and birth tract

Among the authors, there is a correlation between vaginal or cesarean delivery independent vaginal delivery differences that are insignificant in relation to postpartum urinary incontinence. From the studies by Hutton et al.<sup>(20)</sup>, Mendes et al.<sup>(21)</sup>, Lipschuetz et al.<sup>(22)</sup> and Mannion et al.<sup>(23)</sup>, there are insignificant differences between the vaginal and cesarean sections in relation to postpartum urinary incontinence.

Hutton et al.<sup>(24)</sup> conducted a comparative study with two groups of women who had given births of twins for three months, the first by vaginal route and the second by cesarean section, in order to verify some differences, one of them related to urinary incontinence. The study showed no significant difference between the groups, and the proportion of women indicating urinary incontinence problems was 4.5% in the cesarean section group to 7.3 in the normal delivery group.

Mendes et al.<sup>(25)</sup> emphasized that vaginal delivery is seen as a factor that promotes the weakening of the pelvic floor muscles, however, the present study showed that between 50 and 70 days after delivery there is no influence of the type of delivery on the strength of the musculature of the pelvic floor.

In some epidemiological clinical studies, Lipschuetz et al.<sup>(21)</sup> have shown a particularly greater urinary incontinence among women who delivered vaginally compared to those who underwent cesarean delivery. However, the study did not find a significant difference in the rate of urinary incontinence complaint.

According to Mannion et al.<sup>(22)</sup>, urinary incontinence may be related to pregnancy, regardless of the way of delivery, whether it is the spontaneous vaginal, assisted (forceps, vacuum extraction) or cesarean section.Vaginal delivery has been shown to be an independent risk factor for persistent urinary incontinence in the first three months postpartum.

# Therapeutics used in pregnant and puerperal women with urinary incontinence

The study by Wagg, Kendall and Bunn (23) "Women's experiences, beliefs and knowledge of urinary symptoms in the postpartum period and the perceptions of health professionals: a grounded theory study" by Wagg, Kendall e Bunn<sup>(23)</sup>, researched fifteen women and two groups of health professionals about women's experiences, beliefs, and knowledge about postpartum urinary symptoms and perceptions of health professionals.

In this study, it was observed that, on health professionals, with the exception of nurses, there was a certain passivity in the diagnosis of incontinence, waiting for the clients to report the problem<sup>(23)</sup>.

No entanto, além dos enfermeiros, poucos pareciam ter uma abordagem estruturada para a continência. Alguns profissionais de saúde não tinham certeza da escala da questão. Declarações como "eles realmente não dizem" indicaram que não estavam perguntando.

The Study by Sénat et al.<sup>(24)</sup>, in the paper "Postpartum practice: guidelines for clinical practice from the French College of Gynecologists and Obstetricians (CNGOF)" aims to "make evidence-based recommendations for postpartum management of women and their newborns, regardless of the path of delivery". He concludes with the topic of "postpartum pelvic floor muscle training and abdominal rehabilitation" that simple advice on the intentional contraction of the pelvic floor muscles is as effective as exercises with therapists focused on the short term of six months.

Rehabilitation sessions with a therapist are therefore not recommended to treat or prevent prolapse (grade C) or dyspareunia (grade C), and no randomized study has evaluated pelvic floor rehabilitation in asymptomatic women to prevent urinary or anal incontinence in the medium or long term<sup>(25)</sup>.

The Study by Sut and Kaplan<sup>(26)</sup> aimed to investigate the effects of pelvic floor muscle exercise during pregnancy and postpartum period on pelvic floor muscle activity and micturition functions, concluding that exercise increased FMAP, although to a lesser extent, all lost strength in the final period of gestation, tending to improve in both groups. This conclusion converges with the study by Sénat et al.<sup>(27)</sup> in not recommending exercises for asymptomatic women with urinary incontinence.

The study by Brincat et al. <sup>(28)</sup> presents a experiential approach of "Experiences in the first four years of a postpartum perineal clinic in the USA", having as a research space a specialized nucleus, thus allowing the experience on the subject to be intensified and that the program's challenges were listed.

According to Brincat et al.<sup>(26)</sup>, the first point was the preparation of obstetrical nurses to guide patients, focusing on improving outcomes and experiences of postpartum patients, rather than assessing the care provided; the second major challenge was to make patients aware of the needs of care, this challenge being overcome with widespread direct dissemination to patients and awareness of the obstetric team for appropriate referral.

Among the results obtained, it was mentioned that 21.5% of the patients evaluated required some type of procedure, most of them with small changes in habits and exercises and 8.1% with surgical necessity. The clinic becomes important due to the relevance of one in five patients requiring active intervention<sup>(26-27)</sup>.

Therefore, the objectives of this study were: (a) to determine the percentage of women with UI who decide to seek treatment before the sixth month postpartum and (b) to analyze the factors associated with treatment seeking behavior<sup>(26)</sup>.

In the study by Hernández, Aznar and Aranda (28), the research population consisted of women diagnosed with UTI between the 37th and 41st week of gestation, of whom 53 women (37.3%) sought treatment and 39 (27.5%) received treatment. The consultations took place in the following distribution: 26 with a midwife, 14 with a physical therapist, nine with a general practitioner, nine with a gynecologist and three with a rehabilitation physician and one with a urologist, "in all cases, the therapy included an exercise program to strengthen the perine-um, suggested and supervised by a health professional."

Os autores também referiram que 19 (35,8%) mulheres utilizaram contatos de vagina, 13 (24,5%) fizeram uso da estimulação elétrica e três (5,7%) de reciclagem da bexiga. Uma parcela significativa das mulheres investigadas (64,2%) modificou o estilo de vida, tendo-se como resultado a perda de peso, a adesão a programas para melhoria da constipação, a prática de atividade física, o abandono do vício do fumo, a modificação no consumo de líquidos e evitar que a bexiga estivesse muito cheia<sup>(28)</sup>.

Counseling on UI in pregnancy, postpartum physical exercise and Spanish nationality largely explained the treatment seeking behavior. The main factor in this study that provides for seeking treatment, is counseling. Women who received counseling during pregnancy had a high probability of seeing and receiving treatment when the problem appeared in the postpartum period<sup>(29)</sup>.

However, the data found in the present review suggest that when women have UI information, they may be more likely to consult and treat mild symptoms of incontinence without waiting for them to worsen, confirming that the lack of knowledge of available treatment constitutes a significant barrier to such a search<sup>(28-30)</sup>.

## CONCLUSION

Based on the analysis of the articles selected for this review, it is concluded that the nurse plays a fundamental

role in the evaluation, diagnosis, treatment and prevention of urinary incontinence in the puerperal pregnancy cycle, and also serves to effectively support the patient.

Among the findings of the present study we highlight: the effective preventive aspects demonstrated through perineal exercises in the gestation period as a factor of elevation of FMAP; the need for further research on risk factors for association of comorbidities, in addition to those cited, which refer to tobacco use and overweight; sufficient data were not found to confirm a correlation between the forms of delivery and the prevalence of UI in puerperal women.

In addition, it was also evidenced that UI therapy in pregnant and postpartum women should include in their composition: the preparation of the obstetrical nurses team to guide and advise the patients in postpartum pelvic floor muscle training and abdominal rehabilitation, of patients on the importance and effectiveness of these self-care, awareness of a qualified view of the professionals involved in order to avoid the UI normalization climate and the need to maintain a channel of direct communication with the patients.

As residual evidence from the present study, it is important to note that it is important to carry out new and larger studies on UI in Brazil, covering its diagnosis, risk factors and treatment. It also reinforces the need for greater investment in the promotion of actions aimed at the prevention of UI in puerperal women.

It is also noted that the therapeutic orientation has a fundamental contribution to educate the woman about the operation of the lower urinary tract and the exercises of the pelvic floor muscles to strengthen the voluntary contraction of the muscle to the effort. Because it is perceived that the population affected by UI can be considered socially uncomfortable because of this clinical condition.

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