

ANALYSIS OF THE TYPE OF BIRTH DELIVERY AND NUMBER OF CHILDREN WITH URINARY INCONTINENCE IN THE IMMEDIATE PUERPERIA

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Abstract: Introduction: During the pregnancy-puerperal cycle, physiological changes occur that trigger changes in the PA and urinary system, making them prone to the presence of UI during pregnancy, which may remain until the puerperium. **Goal:** To analyze the relationship between type of birth delivery and number of children with urinary incontinence in the immediate postpartum period; Evaluate the biological, sociodemographic characteristics and life habits of the participants; To identify the prevalence of UI in primiparous and multiparous women in the immediate postpartum period and to verify the most prevalent type of UI in the puerperal period. **Methodology:** Cross-sectional study, with a quantitative approach, developed through an online questionnaire. Population composed of puerperal, primiparous and multiparous women, who were in the immediate postpartum period and who answered the questionnaires. Sample with a total of 49 postpartum women who met the eligibility criteria and who voluntarily agreed to participate in the research. **Results:** Vaginal birth delivery was prevalent in 30 postpartum women. Regarding urinary loss, nine reported loss in the immediate postpartum period, of these, five underwent vaginal birth delivery, with four of them multiparous (three vaginal birth deliveries and one vaginal and cesarean delivery), and four underwent cesarean section, with three of them multiparous. (two cesareans and one cesarean and vaginal birth delivery). The most frequent type of urinary loss during the immediate postpartum period was UII with 55.5%. **Conclusion:** Most of the puerperal women who presented greater involuntary loss of urine underwent vaginal birth delivery, as well as the multiparous puerperal women who had a higher prevalence of UI. The most prevalent type of urinary loss was UII.

Keywords: Urinary incontinence. Postpartum period. Parity.

INTRODUCTION

Pelvic floor dysfunctions involve several clinical conditions that refer to changes in the structure, function or perception of the pelvic floor (PA), causing economic and social implications, negatively affecting the quality of life (VASCONCELOS et al., 2013). Among the pelvic floor disorders we can highlight sexual disorders, anorectal disorders, pelvic organ prolapse and voiding disorders. Urinary dysfunctions are related to any change in the act of urinating, which include overactive bladder, neurogenic bladder and urinary incontinence (DIETER; WILKINS; WU, 2015).

Urinary incontinence (UI) is defined by the International Continence Society (SIC) as a condition in which there is an involuntary loss of urine that generates negative effects on daily activities, social interaction and perception of one's own health (ABRAMS et al., 2010). ; DEDICAÇÃO et al., 2009). It can be classified as stress UI (SUI) when there is involuntary loss of urine on exertion or when performing exercises, usually related to increased urethral mobility; urge incontinence, when there is involuntary loss of urine, preceded by urgency, indicating inability to inhibit bladder contractions and mixed UI (MUI) when both types previously prescribed are present (HOLROYD-LEDUC; STRAUS, 2004). There are several factors that can cause UI, including the climacteric due to reduced estrogen levels, neuromuscular trauma, morphological changes, obesity, bladder cancer, smoking, pregnancy and vaginal birth delivery (COSTA; SANTOS, 2012).

During the pregnancy-puerperal cycle, physiological changes occur that can trigger changes in the pelvic floor and urinary system.

During this period, there are changes in the strength of the pelvic floor muscles, hormonal changes, changes in the urethro-vesical angle, changes in connective tissues, an increase in maternal body weight, as well as an increase in the weight of the uterus leading to an increase in intra-abdominal pressure, making more prone to the presence of UI in pregnant and postpartum women (PINHEIRO et al., 2017).

Due to the physiological changes resulting from the pregnancy-puerperal cycle, UI becomes common, often starting during pregnancy and continuing during the puerperium (MACARTHUR et al., 2016). According to some studies that evaluated the prevalence, persistence, as well as the risk factors of UI during this cycle, it was found that the prevalence of UI in pregnancy is 75.25%, and in the puerperium this prevalence is 37, 9%, with SUI being the most frequent (NIGAM et al., 2016; MACARTHUR et al., 2016).

The high prevalence of UI in these women is related to the overload imposed by the pregnant uterus on the pelvic floor muscles, as well as to hormonal changes typical of this period that decrease the tone and strength of this musculature (BATISTA et al., 2011). Epidemiological studies show several risk factors associated with UI in postpartum women, such as gestational age at birth delivery greater than or equal to 37 weeks, UI during pregnancy, traumatic birth deliveries with the use of forceps and/or episiotomy, constipation, vaginal birth delivery and multiparity (SIQUEIRA et al. al., 2019; OLIVEIRA et al., 2010).

Considering that multiparity is one of the factors that predispose to UI, and that pregnancy itself has a negative effect on the pelvic floor muscles, some epidemiological studies have shown that the prevalence of UI increases with the increase in the number of deliveries, becoming more frequent when

vaginal birth delivery is performed due to the trauma caused to the pelvic floor (BARACHO, 2007; HIGA; LOPES; REIS, 2008).

Knowing that UI is reported as a hygienic problem and that it ends up interfering in the social, sexual, physical and psychological spheres of women, limiting them from daily activities and social interaction, promoting emotional changes, including low self-esteem, shame, isolation and depression, negatively affecting the quality of life (FERREIRA; SANTOS, 2012) investigating the manifestations of UI during the gestational period is essential to prevent the loss of urine in the puerperium.

Therefore, the present study has the general objective of analyzing the type of birth delivery and number of children with urinary incontinence in the immediate postpartum period, and as specific objectives to evaluate the biological, sociodemographic characteristics, life habits, identify the prevalence of UI in primiparous and multiparous women in the immediate postpartum period and to verify which type of UI is most prevalent in the postpartum period.

METHODOLOGY

This is a cross-sectional and descriptive study, in which data collection was carried out at a given moment, once and in the same time interval, with a quantitative approach, paying attention to an objective measurement and a quantification of results, using statistical techniques to collect information to analyze and classify them according to percentage, standard deviation and mean (FONTELLES et al., 2009; ZANELLA, 2006).

The study was developed through the internet, using some social networks (Facebook and Instagram), email and conversation application (WhatsApp) for dissemination and forwarding of online questionnaires, created through Google Forms. The population of

the present research consisted of 49 puerperal women, primiparous and multiparous, who were in the immediate postpartum period and who answered the questionnaires sent and the sample was non-probabilistic by “snowball” of the puerperal women who met the eligibility criteria.

Inclusion criteria were: postpartum, primiparous or multiparous women, in the immediate postpartum period (one to 10 days postpartum) and aged over 18 years. The exclusion criteria were postpartum women who used medication that interfered with the function of the lower urinary tract (UTI), postpartum women who had undergone urogynecological surgeries, postpartum women who had already performed specific exercises for the pelvic floor muscles, postpartum women without access to the internet and those who had difficulty understanding the questionnaires and did not complete the questionnaires.

The research was carried out through a digital tool that allowed the construction of the online questionnaire, Google Forms. Along with the questionnaire, the contact of the researchers was sent, so if the participants had any questions they could get in touch with any questions about the research.

The selected postpartum women were up to 10 days postpartum, characterizing the immediate postpartum period, and were initially approached by the researchers through the telephone contact of the postpartum women that the researchers had contact with, introducing themselves and explaining the reason for the approach, and then, explaining the objectives and importance of the present research. For those who expressed interest, a link was sent, containing the survey questionnaire, through the internet, using some social networks (Facebook and Instagram), email and chat application (WhatsApp). On that occasion,

these women were invited to participate in the research, and when possible, they passed on the research link to other postpartum women who would come to know and have contact, thus creating the “snowball” effect. It is worth mentioning that the participant had every right not to want to participate in the research.

When the participants had access to the questionnaire link, they had the first contact with the Free and Informed Consent Term – TCLE (Appendix A) which was only answered after selecting the option: “I voluntarily accept to participate in the research”. All participants received a copy of the informed consent, with one copy with the participant and another with the researcher. Then, the participants answered the survey form (Appendix B), prepared by the researchers through the Google Forms program, containing questions about sociodemographic data and life habits (age, color/race, marital status, schooling, family income, smoking, alcohol consumption, medication use, drug use, physical activity, postpartum time, performance of pelvic floor muscle training, use of medication that interferes with the functioning of the lower urinary tract), characteristics of the) previous pregnancy(s) (performance of urogynecological surgeries, type of birth delivery, quantities of birth delivery, gestational age at birth delivery), questions about the gestational period (how many pregnancies, intervals between pregnancies), urinary characteristics of the last pregnancy and of the puerperium (frequency of urine leakage, quantity of leakage, when did the leakage begin, if treatment was sought, use of protectors and quality of life must gone to loss).

The data collected were recorded in the form of a Microsoft Office Excel 2010 software database, and were analyzed using descriptive statistics. All analyzes were presented using relative and absolute frequencies, measures

of central tendency (mean and median) and variability (standard deviation), through graphs and tables using Microsoft Office Excel 2010 and Microsoft Office Word 2010 software.

The results were presented through a descriptive analysis of absolute numbers and percentages, which were arranged in tables and graphs.

The study met the requirements of the Declaration of Helsinki and complies with Resolution 466/2012 of the National Health Council, which approves the guidelines and regulatory standards for research involving human beings, based on the basic principles of bioethics: autonomy, beneficence, non-maleficence and justice.

Considering Resolution 466/2012 of the National Health Council, the puerperal women signed the Free and Informed Consent Term - TCLE (Appendix A), so that they were sufficiently clarified about all the information, consenting to their participation in the research. Those who agreed to participate were assured of total confidentiality about their identities and were informed of their rights to privacy, as well as the autonomy to decide whether or not to participate in the research and to withdraw from it if they felt uncomfortable. In addition, they were duly notified of the risks and benefits to which they would be subjected.

This study was approved by the Research Ethics Committee of the Centro Universitário – UNIFACISA and the research only started after the issuance of a favorable opinion (CAAE 41670620.5.0000.5175) (ANNEX A).

RESULTAS AND DISCUSSION

The present research consisted of 102 questionnaires answered by postpartum women, but 40 postpartum women were excluded because they were not in the immediate postpartum period, six were

excluded because they had already performed some pelvic floor muscle training, three were excluded because they were younger than 18 years old, and four were excluded because they were not in the immediate postpartum period and because they were younger than 18 years old, leaving the sample with a total of 49 postpartum women.

The mean age of the participants was 27.4 ± 5.3 (ranging from 18 to 39 years), with a mean time of immediate postpartum period of 5.69 ± 2.83 (ranging from 1 to 10 days). Most participants were married (59.2%) and had completed higher education (34.7%). All the information on the biological, sociodemographic and life habits of the research participants can be found in table 1.

UI affects women of all ages but tends to increase with age. A study carried out by Martins, Sousa and Salgado (2010) observed a considerable increase in UI with advancing age, which may be related to the weakness of the pelvic floor and bladder structures, a fact that is explained by the decrease in collagen fibers, replacement of muscle tissue by adipose tissue and decrease in hormone levels during aging. According to the study by Marinho et al. (2006) about 30% of young adult women had UI, but this value increased until it reached about 50% in elderly women. Although in the literature there are few studies on the relationship between UI and age, there are studies that show that UI also affects young women.

A survey carried out in the United States with the aim of describing the incidence of UI during pregnancy and postpartum, found 44% of study participants with postpartum UI aged 35 years or older (LOPES; PRAÇA, 2010).

Regarding lifestyle habits, studies carried out by Martins et al. (2010) and Ebbesen et al. (2013) showed that smoking predisposes to the emergence of UI during pregnancy. This

finding can be explained by the consequences that smoking can cause, including coughing. This factor promotes a greater overload of the pelvic floor musculature, which is already altered due to the pregnancy-puerperal cycle, thus favoring urinary loss (SANTINI et al., 2019). On the other hand, other studies did not show a significant association between smoking and UI during pregnancy (ABDULLAH et al., 2016; BORGES et al., 2010). Research carried out by Lima (2009) is in agreement with this same result when he says that smoking is not associated with the occurrence of UI during pregnancy and the postpartum period.

Another variable analyzed is the influence of illicit drugs on UI. There is no literature that shows a significant association of illicit drugs with UI, but a plausible explanation is that pregnant women who use these drugs also consume alcoholic beverages that stimulate detrusor activity (SANTINI et al., 2019). Study carried out by Parazzini et al. (2003) showed that there is no association between alcohol consumption and postpartum UI. This study contradicts the study carried out by Lopes (2014) who observed that the consumption of alcoholic beverages was associated with the occurrence of UI in the third and sixth postpartum month.

And also about life habits, it is observed that the performance of high-impact physical activity repeatedly promotes an increase in intra-abdominal pressure, thus becoming a probable mechanism responsible for the emergence of UI (POŚWIATA; SOCHA; OPARA, 2014). On the other hand, physical activity with mild to moderate intensity does not interfere with the emergence of this voiding dysfunction (QIU et al., 2011). Some studies have shown that regular physical activity is not a factor associated with UI in pregnant women (BO et al., 2012; HERNÁNDEZ; ARANDA; AZNAR, 2013).

Variable	Participants N = 49
Age	
X ± DP	27,4 ± 5,3
Limits (lower – higher))	(18 - 39)
Breed – n (%)	
Yellow	2 (4,2%)
White	17 (34,7%)
Black	7 (14,2%)
Brown	23 (46,9%)
Marital status – n (%)	
Single	3 (6,1%)
Married	29 (59,2%)
Separated	1 (2,1%)
Stable union	16 (32,6%)
Education – n (%)	
High school level not concluded	2 (4,2%)
High school level concluded	16 (32,6%)
University level not concluded	7 (14,2%)
University level concluded	17 (34,7%)
Postgraduate	6 (12,2%)
Technician level	1 (2,1%)
Family income	
X ± DP	4.105,43 ± 4.692,82
Limits (lower – higher))	(0,0 – 25.000)
Smoker – n (%)	
Yes	0 (0%)
No	49 (100%)
The person consumes alcohol – n (%)	
Yes	5 (10,2%)
No	44 (89,8%)
Drugs – n (%)	
Yes	2 (4,2%)
No	47 (95,1%)
Medication use – n (%)	
Yes	3 (6,1%)
No	46 (93,9%)
Physical Activity Practice – n (%)	
Yes	15 (30,6%)
No	34 (69,4%)

Table 1 - Biological and sociodemographic characteristics and life habits of postpartum women.

Source: Research Data (2021).

In the data obtained in the current research, it was observed that most participants had only one pregnancy (53%) and did not suffer obstetric violence (VO) (81.6%). All information on the characteristics of pregnancies are found in table 2.

Regarding the type and number of birth deliveries, the present study showed that 61.2% (n = 30) of postpartum women underwent vaginal birth delivery, with 19 postpartum women having a vaginal birth delivery, seven postpartum women had two vaginal birth deliveries and four postpartum women had three vaginal birth deliveries. Regarding cesarean section, 42.8% (n = 21) of postpartum women underwent this type of birth delivery, with 13 postpartum women having one cesarean section, five postpartum women having two cesarean sections, three postpartum women having three cesarean sections.

In the current study, it was also found that 57.2% (n = 28) of the participants reported the occurrence of UI during their last pregnancy, with 57.2% (n = 16) being multiparous and 42.8% (n = 12) primiparous. Only 18.4% (n = 9) of the participants reported urinary loss in the immediate postpartum period, of which 55.5% (n = 5) were postpartum women who underwent vaginal birth delivery, in which four of them were multiparous (three vaginal birth deliveries and one vaginal birth delivery and cesarean section), and 44.5% (n = 4) underwent cesarean section, with three of them multiparous (two cesarean sections and one cesarean section and vaginal birth delivery).

There are studies that indicate that women who undergo vaginal birth delivery have a higher prevalence of postpartum UI when compared to women who undergo cesarean section (LEROY; LÚCIO; LOPES, 2016).

According to Higa, Lopes and Reis (2008), vaginal birth delivery is related to the presence

of UI in the postpartum period, however this type of birth delivery in particular does not promote UI, but when associated with injuries and trauma to the pelvic floor. Pelvic floor injuries occur when the cervix dilates during the expulsive period, promoting the accentuated stretching of the pelvic floor support elements, increasing the probability of damage to these structures, which may extend in the postpartum period with the laxity of the muscles of the pelvic floor adversely affecting the action and strength of these muscles, leading to UI (MARTINS; SOUSA; SALGADO, 2010).

In agreement with previous studies, Lopes and Praça (2012) and Boyles et al. (2009) also report that in their studies, women with UI who had vaginal birth delivery were the most affected. In a study carried out by Goldberg et al. (2003), women who had a history of vaginal birth delivery showed a UI rate of 60.4%, while women who underwent cesarean section had a UI rate of 39.6%. In an attempt to explain the modes of birth delivery as a risk factor for UI, a study that involved ultrasound examinations of the pelvic floor muscles in vaginal and cesarean deliveries (elective and non-elective) did not show statistically significant differences between the types of birth delivery and UI, nor with anatomical changes in the pelvic floor (ARAUJO et al., 2018).

It is discussed by Albrescht (2006) that women undergoing cesarean section may have a greater complaint of UI, which contradicts the authors mentioned above. The same author verified that the prevalence of UI in the puerperium is decisively related to the type of birth delivery, as well as to hormonal and anatomical changes in the pelvic support structures during pregnancy, reaching the conclusion that it is the gestational period that favors the presence of UI, predisposing to the emergence of dysfunction in the puerperium.

Variable	puerperal women N = 49
Number of pregnancies – n (%)	
1 pregnancies	26 (53,0%)
2 pregnancies	11 (22,4%)
3 pregnancies	10 (20,4%)
4 pregnancies	1 (2,1%)
5 pregnancies	1 (2,1%)
Number of abortions – n (%)	
1 abortions	6 (80%)
2 abortions	2 (20%)
Number of birth deliveries – n (%)	
1 birth deliveries	28 (57,2%)
Number of birth deliveries – n (%)	
2 birth deliveries	14 (28,6%)
3 birth deliveries	7 (14,2%)
The person has suffered an OV – n (%)	
Yes	9 (18,4%)
No	40 (81,6%)

Table 2 - Characteristics of previous pregnancies.

Source: Research Data (2021).

According to Martins (2010), cesarean section has a significant relationship with the prevalence of UI, when it is related to previous birth deliveries among multiparous women. Like the aforementioned author, Moisés et al. (2011) concluded that multiparous women who underwent cesarean sections had a higher rate of UI complaints than those who underwent vaginal birth delivery. On the other hand, other studies have associated cesarean section with a reduction in the risk of UI, even if its protective effect on the emergence of involuntary urine loss is uncertain (CASEY et al., 2005; FRITEL et al., 2004).

In addition to the type of birth delivery, parity is one of the factors most likely to develop UI, which is very common during pregnancy and can be caused by a combination of hormonal and mechanical factors. However, most women do not report urinary leakage complaints immediately after birth delivery (GUARISI et al., 2001).

Several studies report that UI is more prevalent in multiparous women, thus stating that childbirth is the biggest cause of pelvic floor injury, since the greater the parity, the more evident are the pelvic floor injuries or adjacent tissues, the that increases the risk of UI (MARTINS; SOUSA; SALGADO, 2010). In a study carried out by Mourão et al. (2017), it was also evidenced that the greater number of birth deliveries is one of the interferences to originate UI.

On the other hand, studies carried out by Lopes and Praça (2012) with postpartum women identified a higher prevalence of UI in those who were primiparous. However, other studies still report that there is no association between UI and parity (MARINHO et al., 2006). A study carried out by Siqueira et al. (2019), correlated parity with type of birth delivery and observed that primiparous women who underwent vaginal birth delivery are at greater risk of developing urinary

symptoms compared to those who underwent cesarean section.

With regard to obstetric interventions during labor, of the 49 postpartum women included in the study, nine reported having suffered obstetric violence (VO) in previous birth deliveries, in which four postpartum women underwent episiotomy without consent, three postpartum women underwent According to Kristeller, two postpartum women underwent the lithotomy position against their will and two postpartum women were unable to move during labor. Corroborating the data found, a survey carried out by Leal et al. (2014), pointed out that during labor, the main obstetric interventions practiced are: lithotomy (92%), episiotomy (56%) and Kristeller maneuver (37%).

Among the reported OR, it is known that episiotomy is one of the risk factors associated with UI in the puerperium. Therefore, studies show that this type of intervention increases the risk of perineal laceration, infection and bleeding, in addition to complications such as urinary and fecal incontinence (ANDRADE et al., 2016). However, there are studies that show that women undergoing selective episiotomy had less severe perineal trauma, need for suturing and scar complications, however, no statistically significant difference was observed between the selective and routine episiotomy groups with episodes of urinary leakage (MACHADO et al., 2017).

The gestational age of the last pregnancy in the present study ranged from 38 to 41 weeks. Studies show that the prevalence of UI increases with gestational age and usually worsens in the third trimester because it is related to mechanical changes during the gestational period (DE-TOFFOL; SCHNEIDER, 2017).

In some studies, the gestational age at birth delivery has been investigated, but its correlation with UI in the puerperium has not been proven. However, it is known that

the higher the gestational age, the greater the risk of UI during pregnancy and the greater its incidence. Therefore, a higher gestational age during childbirth can influence the appearance of UI in the postpartum period due to the longer time and overload of the gravid uterus on the suspension and support structures of the pelvis and, consequently, the risk of UI already being present during pregnancy. (LEROY; LÚCIO; LOPES, 2016).

Of the 57.2% postpartum women who had urine leakage during the last pregnancy, the most frequent type of urinary leakage reported was SUI with 89.2%, in which 18 participants reported losing urine when coughing, 10 participants lost urine when sneezing, four participants lost when lifting weights, four patients lost when squatting or jumping, three participants lost when cleaning the house and one participant lost when laughing. All other findings on urinary characteristics of the last pregnancy are shown in Table 3.

In order to reduce the discomfort generated by urinary loss during pregnancy, 24.5% of the participants in the present study reported that they used protection. Among the 12 participants who used the protection, three reported that they used one protection per day, five participants used two protections/day, two participants used three protections/day, and two participants used more than three protections/day.

Figueiredo et al. (2008) observed in their study a high prevalence of the use of intimate protectors and justified that this fact was probably aimed at reducing the discomfort caused by urinary loss. In contrast to this study, Martins, Sousa and Salgado (2010) observed in their study the low use of intimate protectors to reduce the discomfort caused by urinary loss during pregnancy and puerperium. This same study also shows that this habit observed in the participants can portray their strategies of how they face urinary loss, indicating the

need to use or not use intimate protectors or to modify their daily activities.

Of the 28 participants who reported loss of urine in the last pregnancy, only 7.1% (n = 2) of them sought treatment for the dysfunction, with pelvic physiotherapy being performed in both. However, during pregnancy, 53.1% of the participants reported that they received guidance and clarification regarding the urinary dysfunctions that could appear during this moment and 81.6% of them were aware of the exercises that can be performed to strengthen the pelvic floor muscles.

Although there are treatments that help in these cases, women rarely seek treatment for UI due to cost concerns, shame, and often because they believe that urinary leakage is normal and that there is no need for treatment. In addition, many women believe that UI is a natural response of the body during pregnancy (ALMEIDA; CANDIDO; NETTO, 2020). According to Silva and Lopes (2009), the lack of knowledge about the symptoms of UI, as well as about the physical therapy treatment and the fact that they do not consider this an important problem, are reasons for not seeking treatment.

Regarding the urinary characteristics of the current puerperium, it was found that among the puerperal women who reported urine loss, these losses occurred most of the time once a day (10.2%) and in small amounts (12.2%). In addition, it was observed that of the 18.4% postpartum women with UI, 55.5% had UI, 33.3% had SUI and only 11.2% had MUI in the immediate postpartum period. All other information can be found in table 4.

Regarding the prevalence of UI in the postpartum period, a study carried out by Lima and Lopes (2011) reports that urinary loss on exertion was observed in 4.6% of postpartum women in their study, considering coughing, sneezing, laughter or any other physical exertion. Leroy, Lúcio and

Variable	puerperal women N = 49
The person had urine leakage during the last pregnancy – n (%)	
Yes	28 (57,2%)
No	21 (42,8%)
Loss frequency – n (%)	
Once a week or less	7 (14,3%)
Two or three times a week	6 (12,2%)
Once a day	6 (12,2%)
Many times per day	9 (18,5%)
Never	21 (42,8%)
Time when the loss of urine started – n (%)	
During the first trimester	0 (0%)
During the second trimester	8 (16,4%)
During the third trimester	19 (38,7%)
After the first birth	1 (2,1%)
I did not lose urine	21 (42,8%)
Urine leakage on exertion – n (%)	
Yes	25 (89,2%)
No	3 (10,8%)
The person had an urgency – n (%)	
Most of the time, the person had to run, but didn't lose in the panties	7 (14,2%)
Most of the time, the person had to run and sometimes wet their panties	11 (22,4%)
Most of the time, the person had to run and always wet their panties	3 (6,2%)
Most of the time, the person was able to control and hold at will, without having to run away.	28 (57,2%)
Amount of urine lost – n (%)	
Small quantity	12 (42,8%)
Moderate quantity	14 (50%)
Great quantity	2 (7,2%)
The person used protection for urinary leakage – n (%)	
Yes	12 (24,5%)
No	37 (75,5%)

Table 3 - Urinary characteristics of the last pregnancy.

Source: Research Data (2021).

Variable	puerperal women N = 49
Urinary leakage in the immediate postpartum period – n (%)	
Yes	9 (18,4%)
No	40 (81,6%)
Moment of loss – n (%)	
Cough / sneeze	2 (22,2%)
Laugh	1 (11,1%)
Loss moment – n (%)	
Wander	1 (11,1%)
Rest	1 (11,1%)
baby care	1 (11,1%)
The person wants to pee	6 (66,6%)
Loss frequency – n (%)	
Once a week or less	4 (8,2%)
Two or three times per week	0 (0%)
Once a day	5 (10,2%)
Many times per day	0 (0%)
All the time	0 (0%)
Never	40 (81,6%)
Amount of urine lost – n (%)	
Small quantity	6 (12,2%)
Moderate quantity	3 (6,2%)
Great quantity	0 (0%)
The person is not losing	40 (81,6%)
The person uses some protection – n (%)	
Yes	7 (14,2%)
No	42 (85,8%)
The person changed daily activities due to urine leakage – n (%)	
Yes	0 (0%)
No	49 (100%)

Table 4 - Urinary characteristics of the current puerperium.

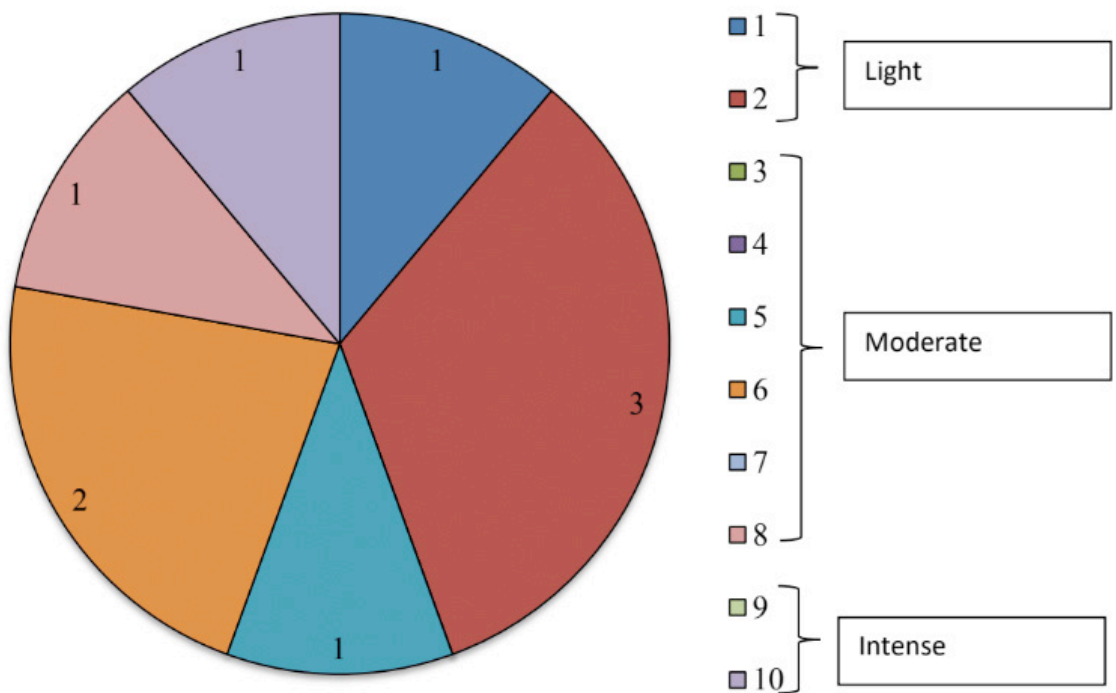
Source: Research Data (2021).

Lopes (2016) also confirm that the puerperal women in their study had more frequent SUI when coughing, sneezing and/or performing physical activities. Disagreeing with the findings of the current research, in the study by Rocha et al. (2017), the prevalence of postpartum UI was 34.60%, with SUI being the most prevalent with 82.93%, and UUI or MUI with 9.76% and 15.85%, respectively.

Frequently, UI occurs during pregnancy, which may be a predictive condition for the occurrence of incontinence in the puerperium (MOISÉS et al., 2011). In pregnancy, UI symptoms can start from the first trimester, becoming more frequent in the last trimester (LIMA, 2009). The prevalence of UI varies

between 75.25% during pregnancy and 37.9% in the postpartum period (NIGAM et al., 2016; MACARTHUR et al., 2016). The justification for the increase in this prevalence during pregnancy is due to the fact that pregnancy promotes changes in the strength of the pelvic floor muscles, as well as the excess weight generated by the uterus, increasing intra-vesical and intra-abdominal pressure, predetermining women to develop UI (RIBAS et al., 2019).

Another data collected in the research was about how much urinary leakage interferes with the participants' lives during the puerperium, on a scale that ranged from 1 to 10. The results collected are shown in graph 1.



Graph 1 – Interference of urinary loss in daily life during the immediate postpartum period.

Source: survey data, 2021

Disagreeing with the findings of the present research, studies in the literature show that UI negatively affects, as well as promotes negative impacts on the quality of life of pregnant and postpartum women, causing them to worry and submit to social isolation, so that they are avoided. possible constraints (SANTINI et al., 2019). Other studies corroborate the aforementioned study, in which urinary loss interferes with daily life in a way that affects the quality of life in the postpartum period, in addition to promoting social discomfort, discomfort, embarrassment and interference with psychological well-being. (LOPES; PRAÇA, 2012; MARTINS; SOUSA; SALGADO, 2010; LOPES; PRAÇA, 2019).

CONCLUSION

It was possible to observe in this study that the presence of UI in the participants was greater during pregnancy when compared to the puerperal period. Despite this, most of the puerperal women with UI in the immediate postpartum period underwent vaginal birth delivery and were multiparous.

In addition, unlike what was found during the last pregnancy, in which the most prevalent UI was SUI, in the immediate postpartum period most participants reported the presence of UUI.

Regarding sociodemographic characteristics, it was found that most participants were married and had completed higher education. In life habits, low prevalences were found related to smoking, consumption of alcoholic beverages, use of illicit drugs and medications, as well as the majority did not practice physical activities, although there are studies that associate smoking, the consumption of alcoholic beverages and the performance of physical activities. physical activity with UI in the pregnancy-puerperal cycle.

In the present study, we obtained a limited

sample, with a reduced number of postpartum women with the presence of this voiding dysfunction. Therefore, there was a need to carry out more research aimed at analyzing UI during the immediate postpartum period, with a larger sample of women.

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