# QUALITY OF LIFE OF WOMEN WITH URINARY INCONTINENCE

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Introduction: Urinary incontinence (UI) represents a common problem among women, and compromises their quality of life. The aim was to measure the quality of life of women with complaints of urinary incontinence. These women received medical care at the Urology Outpatient Care Center of a teaching hospital. Forty-three women who had complaints of UI were interviewed. All ethical principles for research involving human beings were respected. The average age was 50.7 years. 62.5% reported urinary leakage for 5-9 years. There were several allusions to physical and psychological damages caused by urinary incontinence: 33.5% to psychosocial interactions, 23.3% to sex life, 41.9% reported depression and social isolation, 27.9% sleep disorders and 76.7% embarrassment due to urine leakage. The obtained data permit amplified actions for treatment and counseling of women with urinary incontinence.

Descriptors: Urinary Incontinence; Quality of Life; Referred Morbidity.

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# QUALIDADE DE VIDA DE MULHERES COM INCONTINÊNCIA URINÁRIA

A incontinência urinária (IU) representa problema comum entre mulheres, comprometendo sua qualidade de vida. Teve-se, aqui, o objetivo de investigar a qualidade de vida de mulheres com queixa de incontinência urinária que buscaram atendimento médico em ambulatório de urologia, de um hospital de ensino. Foram entrevistadas 43 mulheres com queixa de IU, preservando-se os aspetos éticos de pesquisa em seres humanos. Obteve-se, como resultados, que a idade média foi de 50,7 anos, 62,8% referiram perda de urina entre 5 e 9 anos. Houve muitos relatos de danos físicos e psicológicos decorrentes da IU: 33,5% na interação psicossocial, 23,3% na vida sexual, 41,9% depressão e isolamento social, 27,9% alterações do sono, 76,7% relataram constrangimento por perda de urina. Concluise que os dados obtidos permitem o desenvolvimento de ações amplas no atendimento e orientação a mulheres com IU.

Descritores: Incontinência Urinária; Qualidade de Vida; Morbidade Referida.

# CALIDAD DE VIDA DE MUJERES CON INCONTINENCIA URINARIA

La incontinencia urinaria (IU) es un problema común, afectando principalmente a las mujeres, y perjudica su calidad de vida. La finalidad fue investigar la calidad de vida de mujeres con quejas de incontinencia urinaria que buscaron atendimiento médico en ambulatorio de urología de un hospital escuela. Se entrevistó a 43 mujeres con queja de IU y se cumplieron todos los aspectos éticos de la investigación en seres humanos. La media de edad fue de 50,7 años; 62,8% relataron pérdida de orina entre 5 y 9 anos. Hubo muchos relatos de daños físicos y psicológicos causados por la incontinencia urinaria: un 33,5% en la interacción psicosocial; un 23,3% en la vida sexual; 41,9% depresión y aislamiento social; 27,9% alteraciones del sueño; 76,7% vergüenza debido a la pérdida de orina. Los datos obtenidos permiten acciones ampliadas para el atendimiento médico y la orientación de mujeres con incontinencia urinaria.

Descriptores: Incontinencia Urinaria; Calidad de Vida; Morbilidad Referida.

### Introduction

Generally, the term urinary incontinence (UI) has the notion of urine loss by the elderly, who must use continence devices. However, according to the International Continence Society (ICS), UI is defined as any involuntary loss of urine, and it can happen to anyone, independently from age and gender. It is mostly diagnosed among women and those more elderly, being that, in women of reproductive age, the most common type found is called stress urinary incontinence (SUI), usually manifested during the execution of activities like laughing, climbing stairs, walking or situations of continuous stress<sup>(1-6)</sup>.

It is estimated that around 50% of women present

urinary incontinence, especially during the pregnancy and after the reproductive age. The urinary loss can occur in different situations in every-day life, causing incapacities that increment the morbidity among the affected women, such as, psycho-social alterations, exclusion from the social circle, to protect themselves from the nuances caused by urinary losses, besides the tendency to decrease fluid intake, causing urinary infection and kidney damage<sup>(1-4)</sup>. IN research made in the United States of America, it was verified that among 13 million people with UI, 11 million (85%) were women<sup>(3)</sup>, which can be explained by the anatomical conditions, the hormonal alterations during

pregnancy and the weakening of the perineum muscles that occurs with the progression of age, causing the dysfunction of the pelvis<sup>(7-12)</sup>. Among the factors associated with urinary incontinence the following can be named, the intrinsic urethral sphincter deficiency, increase in intraabdominal pressure<sup>(3)</sup>, gestational period, elevated number of labors, obstetric trauma, obesity, smoking, chronic neurological and respiratory diseases, surgical treatments, use of anti-allergenic medication and life style<sup>(4-10)</sup>.

Several factors can be related to feeling the symptoms of UI in women, with more prevalence among white women, with advanced age, obesity, menopause, gynecological surgeries, intestinal constipation, chronic diseases, hereditary factors, drug use, caffeine intake, smoking and physical exercises<sup>(11-13)</sup>. Still, anatomic alterations can cause UI like hyper mobility of the urethra and sphincter deficiency<sup>(3,14)</sup>, modifications in the pelvic floor<sup>(15)</sup>, distensions in the muscular fiber of the urethra<sup>(7)</sup> and instability of the detrusor muscle of the urinary bladder<sup>(4,16)</sup>.

Until 1998, the UI was considered to be only a symptom and, from the date until today, it became classified as a disease (CID/WHO)<sup>(8)</sup>. The new definition of UI occurred from the valorization of the low quality of life (QL), reported mainly by women afflicted by this health problem<sup>(11)</sup>.

Over the last decade, the research and debates have increased on the quality of life and the mentioned morbidity, in different contexts, life cycles and healthcare areas. The quality of life (QL) is a predominantly human notion, related to the degree of satisfaction found in the family, love, social, environmental lives and existential values. For the World Health Organization, the QL reflects the position of a person in life, in the context of the culture from where the person lives, the system of values, objectives, expectations, standard and concerns <sup>(9)</sup>.

Thus, the UI is included in one of the situations that affect the QL of people, by compromising the sex, social, domestic, occupational life, with physical, psycho-social and financial damage, making them vulnerable to several problems due to the restrictions it applies in the daily life activities, becoming a great public healthcare problem. Therefore, it becomes relevant to increase research in this context, to reveal the aspects that damage the daily life of women with UI and, thus, propose and implement education and intervention measures to minimize the consequences of this problem.

Due to the feelings of shame and embarrassment that makes diagnosis difficult, for not seeking treatment to this problem, UI configures itself as a "hidden" epidemic. The same way, this health condition, especially in women, maybe for the lack of information on the issue, many times is neglected by health professionals that do not enquire about this topic, during taking the medical history or clinical exam, in different areas of healthcare.

Therefore, this study had the objective of investigating the quality of life of women with urinary incontinence complaints, who sought out medical attention in a urology clinic of a teaching hospital.

### Casuistry and method

It is a descriptive and exploratory research, made with women with urinary incontinence complaints, seen in the urology clinic of a teaching hospital located in São José do Rio Preto, SP, to verify the repercussion of UI in the quality of life of these women. The studied institution is part of a massive hospital complex, located in the Northwest region in the State of São Paulo, with teaching, research and assistance purposes, being a reference in service in different specialties in the healthcare area. Most of the users belong to the Public Healthcare System (SUS).

The ethical aspects on research involving human beings were preserved, cited in the Regulating Directives and Guidelines of Research in Human Beings, approved by Resolution CNS 196/96. Thus, the data collecting was made after the approval of this project by the Ethics Committee in Research (CEP) of FAMERP (Judgment n°163/2008 – Protocol n°3169/2008).

For the data collection, a form was made, adapted from a validated instrument<sup>(1)</sup> on the quality of life of women with urinary incontinence (UI), applied as an interview, between July and December of 2008, in 43 women with UI who agreed to participate in the study. The data obtained are presented in tables and analyzed according to absolute and percentage indexes.

### Results and discussion

This study was made among women, for being afflicted by urinary incontinence, 43 were attended in the urology clinic of a teaching hospital, with urinary incontinence complaints, that agreed to participate, in the defined period to collect the data. Among the social-demographical data obtained in this research it was verified that the mean age of the women was 50.7 years old, prevailing the age range of 60 years old or higher (32.6%), 25 (58.1%) were married, 39 (90.7%) had 1 or more children, 21 (48.2%) had paid employment, 4 (9.30%) were retired, 1 (2.3%) were unemployed and the rest had "house work" and 29 (67.4%) had incomplete elementary school education.

In other researches, with the evaluation of socialdemographical data of women with UI, it was verified a varied mean age, like 49.2 years old<sup>(2)</sup>, of 43 years<sup>(11)</sup>, of 67 years<sup>(17)</sup> and between 45 and 60 years old<sup>(18)</sup>. In Brazil, the prevalence of complaints by UI is after 41 years old and between 30% and 50% of the women do not report the UI during a medical appointment. In some researches it was seen that the older women tend to accept UI as normal<sup>(3,10-11)</sup>. Regarding the relation of the education and occupational activity, no significant difference was seen among women with UI(19-20). Using information from current literature, from 14 to 46% of the women with the ages between 20 and 89 years old already presented an episode of UI<sup>(2,7)</sup>, specially related to the pregnancy cycle, obstetric and gynecological surgeries and to menopause, when there are hormonal alterations and decrease of fibers from collagens and muscular. Since the structures of the pelvic floor and the inferior urinary tract are dependent

hormones, it is possible that the appearance of the UI, that, besides the unpleasant involuntary loss of urine, many times it triggers psycho-social and hygiene problems, specially in the most serious ones<sup>(11)</sup>.

Table 1 presents the information on obstetric and surgical priors among the women participating in the research. It was seen that 18 (41.9%) women in this study had the surgical procedure vaginally and 23 (53.5%) abdominally. Most of them (40-93%) had pregnancies and labors, with an average of 2.93 and 2.65, respectively. The number of women in the study that had one or more normal labors was 31 (73%).

Table 1 – Absolute and percentage distribution of women with urinary incontinence (UI), attended in a teaching hospital, according to surgical and obstetric priors. São José do Rio Preto, Brazil, 2008

Variables	n	%	Mean
Surgical Procedure*			
Vaginal	18	41.9	
Abdominal	23	53.5	
Obstetric priors†			
Pregnancies	40	93.0	2.93
Labors	39	90.7	2.65
Types of labors			
C-section	21	48.8	0.77
Normal	31	72.1	1.88
Procedures			
Forceps	5	11.6	0.12
Episiotomy	23	53.5	0.98

<sup>\*</sup>The surgical procedures were related to labors or gynecological afflictions

Among the factors that might be associated to stress urinary incontinence is the intrinsic urethral sphincter deficiency, increase in intra-abdominal pressure, pregnancy period, elevated number of labors, obstetric trauma, obesity, smoking, neurological diseases, chronic respiratory diseases and gynecological surgical treatments(12-24). The incontinent woman, especially married or with an active sex life, suffer great impact in their quality of life, because they are always afraid to lose urine in certain situations like intercourse, they feel ashamed to interrupt to urinate and disappoint the partner, at leisure, they are always concerned in finding a toilet, have excessive care with personal hygiene, in fear of someone sensing the urine odor, the quality of sleep is compromised, since they get up many times to urinate, which promotes fatigue and energy expenditure, causing deficit in the Professional performance and other problems in the everyday life<sup>(7)</sup>.

Table 2 shows the morbidity data of the women participating in the study, showing that 24 (55.8%) reported seeking medical assistance rarely, 33 (76.7%) referred to having another health problem and 32 (74.4%) were taking

one or more medications. The pathology associated to the loss of urine that prevailed the most in this research was alteration um the lumbar column (20-46.5%), followed by repeated urinary infections (19-44.2%) and hypertension reported by 16 (37.2) women.

Table 2 - Absolute and percentage distribution of women with urinary incontinence (UI), attended in a teaching hospital, according to the morbidity data. São José do Rio Preto, SP, Brazil, 2008

Variables	n	%
Seek medical assistance		
Many times	13	30.2
Rarely	24	55.8
Only when needed	6	13.9
Use of medication		
No	11	25.6
Yes	32	74.4
Health Problem		
Repetitive urinary infections	19	44.2
Endometriosis	3	7.0
Sexually Transmitted Diseases	4	9.3
Kidney Stones	9	20.9
Hypertension	16	37.2
Diabetes	5	11.6
Lumbar column alteration	20	46,5
Skull fracture	2	4,6

The repeated urinary infections cause the urge-incontinence<sup>(3)</sup>. Hypertension (HTN) is a present factor in most of the incontinent women, related to the medication used for its treatment<sup>(12)</sup>.

In a study made on UI with 35 women complaining of urine loss, 16 of them reported that they did not seek any type of treatment for UI for thinking that it was normal, and 13 were treated with surgical therapy<sup>(19)</sup>. Many post-menopausal women believed that the urinary incontinence is due to age, with no possible treatments. Others are embarrassed by the affliction and omit their symptoms from family and doctors<sup>(2,9)</sup>. In Brazil, between 30 and 50% of the women do not report UI during a medical appointment<sup>(3, 10-11)</sup>. A study showed that only 10.7% of the women went to a medical appointment reporting UI<sup>(2)</sup>.

Regarding time, circumstances of uro-gynecological alterations by UI and liquid intake, among the participating women in this study, it is observed in Table 3: 27 (62.8%) women referred presenting urine loss for a period from 5 to 9 years; 8 (18.6%) reported living with this problem for 10 years or more, most of them (27-62.8%) reported urine loss while performing a physical activity, corresponding to 15 (34.9%) that happened occasionally and 12 (27.9%) frequently. As for the daily fluid intake, most of the women participating in this study (26-60.5%) mentioned ingesting a quantity lower to one liter of liquids daily.

<sup>†</sup>Thirty-nine women underwent the labor process, some had more the 1 child and other never got pregnant.

Table 3 - Absolute and percentage distribution of women with urinary incontinence (UI), attended in a teaching hospital, according to the morbidity data. São José do Rio Preto, SP, Brazil, 2008

Variables	n	%
Time of uro-gynecological alteration		
Less than 12 months	2	4.6
12 to 24 months	5	11.6
3 to 4 years	27	62.8
5 to 9 years	1	2.3
10 years or more	8	18.6
Urine loss during physical activity		
Never	16	37.2
Occasionally	15	34.9
Frequently	12	27.9
Daily fluid intake		
1 to 2 liters	7	16.3
About 1 liter	10	23.2
Less than 1 liter	26	60.5

The inadequate handling of UI, with the added prolonged restriction of fluid intake to reduce the urine loss episodes, can cause complications like urinary infection, reflux and kidney damage<sup>(23)</sup>.

Table 4 shows the response of the women in this study regarding the compromising of the quality of life, by the limitations of daily and occupational activities, verifying that most of the women reported that the UI causes an impact in their daily lives and, therefore, in their quality of live. Regarding the limitation of performing tasks, of 30 (69.8%), (9-20.9%) had little, (8-18.6%) regular and (13-30.3%) a lot, the remaining 13 (30.2%) women did not think that the UI compromised their performance in daily activities. As for the loss in family, social and conjugal interaction, most of them referred not to have problems with their sex life (23–53.5%), with the partner (23-53.5%) with family members (31-72.1%). On their intimate perception of UI on the other hand, 33 (76.7%) manifested having emotional problems like depression, being 8 (41.9%) many times, 9 (20.9%) regular and 6 (14%) little. The sleep and rest depravation, due to UI, was not reported by 18 (41.9%) of the women, while the remaining women reported having constant rest depravation (12-27.9%), several times (8-18.6%) and sometimes (5-11.6%). Finally, 30 (69.8%) reported not having fatigue problem related to the UI, but 30 (69.8%) reported more energy expenditure, always 16 (37.2%), many times 5 (11.6%) and sometimes 9 (20.9%) of the women.

Table 4 - Absolute and percentage distribution of women with urinary incontinence (UI), attended in a teaching hospital, according to the limitations in the daily life activities. São José do Rio Preto, SP, Brazil, 2008

	Scores							
	Population (n=43)							
	None		Little		Regular		A Lot	
	n	%	n	%	n	%	n	%
Limitation in performing tasks								
Work and/or daily activity	13	30.2	9	20.9	8	18.6	13	30.2
Social and Physical Limitation								
Physical activities	15	34.9	6	14.0	7	16.3	15	34.9
Psycho-social interaction	28	65.1	2	4.7	4	9.3	9	20.9
Damaged personal relations								
Sex Life	23	53.5	3	7.0	8	18.6	10	23.3
Partner	23	53.5	3	7.0	4	9.3	13	30.2
Family members	31	72.1	4	9.3	4	9.3	4	9.3
Emotional								
Depression	10	23.3	6	14.0	9	20.9	18	41.9
	No	Sometimes		Several Times		Always		
	n	%	n	%	n	%	n	%
Deprived sleep and energy								
Sleep	18	41.9	5	11.6	8	18.6	12	27.9
Energy (fatigue)	13	30.2	9	20.9	5	11.6	16	37.2

The restrictions and afflictions reported by the people with symptoms of UI are highlighted in a few studies, the main afflictions being sexual, the psycho-emotional alterations and the decrease in quality of sleep/rest, compromising the quality of life.

The damages that were more highlighted in the

researches are the ones that occurred during physical and domestic activities, the excessive fatigue, embarrassment, excessive nervousness and comprise in daily work activities, revealing that the limitations and discomforts can cause feelings of sadness and loneliness in the afflicted people<sup>(5,9-10)</sup>.

The presence of UI in women can lead them to less physical activities, considering that the UI is a great barrier to this practice, since many women with UI abandon physical activity in fear of urinary loss and embarrassment for being seen with the problem<sup>(20-21)</sup>.

In a research on the impact of UI among women in the workforce, 69.3% of them with ages below 50 years old, it was verified that UI can cause fatigue, embarrassment, shift in focus and emotional stress, during work hours <sup>(23)</sup>. Another study revealed that 15.2% mentioned that the UI interfered in work performance due to the constant work interruptions for bathroom breaks. Also revealed in this study that the UI caused financial losses because 1.2% of the women were fired or 0.6% had to resign<sup>(19)</sup>.

Another study showed that social restrictions was the complaint of 33.5% of the women and that UI prevented many women from leaving the house, from going to parties and clubs, long travels and attending church<sup>(2)</sup>. The psychosocial consequences of UI that restrict daily activities are more devastating then the side effect this disease cause to the physical health <sup>(22)</sup>. The emotional state of the women participating in this study was the most compromised, which meets the confirmations of several authors when showing that the serious UI is also associated to feelings of loneliness, sadness, symptoms of depression, followed by decrease in self-esteem and increase in anxiety<sup>(2,7-8,21,24)</sup>.

Interference on the sex life was mentioned by 21 (48.8%) of the women in this study, number close to the one found in another research, verifying that 40.9% of the women had their sex lives compromised by UI <sup>(2)</sup>. The results from another study that investigated the sexual satisfaction and health perception in women with UI, showed that women living with UI, for a long time, tend to adjust their sexual practice<sup>(8)</sup>.

In this study, the UI interfered negatively, in different degrees, in their sleep 25 (58.1%) and fatigue, as consequence was mentioned by 30 (69.8%) women. In a research made with 54 women with UI, it was verified that the number of night urinations is related to sleep alteration, decreasing the energy and compromising the emotions of incontinent women<sup>(1)</sup>.

Table 5 shows the main complaints of the women in this study in relation to the degree of discomfort caused by UI, mentioning: frequent bathroom breaks (79.1%), losing urine when coughing and sneezing and the consequent embarrassment (76.7%), becoming wet due to the loss of urine (74.4%), worsening of UI with the progression of age and loss of urine before reaching the bathroom (72.1%), time restriction when outside the home (65.1%), discomfort caused by the urine's odor (60.5%) and control of fluid intake.

Table 5 - Absolute and percentage distribution of women with urinary incontinence (UI), attended in a teaching hospital, according to the UI-related complaints. São José do Rio Preto, SP, Brazil, 2008

Complaints	Degree of discomfort				
	None	e/light	Moderate/severe		
	n	%	n	%	
ocating bathrooms in unknown locations	9	20.9	34	79.1	
Constant bathroom breaks	9	20.9	34	79.1	
osing urine while coughing or sneezing	10	23.3	33	76.7	
Embarrassment due to urine loss	10	23.3	33	76.7	
Setting wet by urine loss	11	25.6	32	74.4	
Vorsening of the problem with age	12	27.9	31	72.1	
oss of urine before reaching the bathroom	12	27.9	31	72.1	
Time restriction when outside the home	15	34.9	28	65.1	
Jrine odor	17	39.5	26	60.5	
Control of fluid intake	24	55.8	19	44.2	

The fact that more than 70% of the women with UI in this study have reported that they suffer from the embarrassment this problem causes in their daily lives, agrees with the results obtained by other authors regarding the important physical and psychological damages, besides the negative repercussion in social interaction, especially revealed in studies on the quality of life of women with UI<sup>(1,2,5-9,17-18,20-24)</sup>.

During the health appointment, it must be taken into consideration the complaints or enquire people on urinary loss, including the behavioral modifications that are developed to adapt to the inconvenience and reducing the impact of the symptoms, including: increase in urinary frequency, constant search for a bathroom location, restrictive diets, limitation of the physical activity; and in more severe cases, limitation of the social activities. This can result in secondary isolation, forbidding the visitations of meeting places, like shopping centers, churches and family reunions. Therefore, it becomes a vicious cycle of anxiety and suffering related to the possible urinary loss, feeling of embarrassment that leads to an important psychological discomfort and varied degrees of social

isolation, with different degrees of compromise in the quality of life.

By the results obtained and the analysis of the mentioned literature, it can be clearly noticed the UI problem, especially among women, which requires further study and better performance of healthcare professional in caring for these women, whether it is in the educational aspect, aggravation prevention or intervention to minimize the problem.

### Conclusion

It was verified in this study that urinary incontinence (UI) affects many aspects in the quality of life (QL), in most of the participating women of the research, with a high degree of complaints as for the repercussions of UI in the daily life activities. Generally, the participating women reported compromise in their daily life due to the UI problem, with damages especially in social interaction, exposing the need for the proper professional intervention in the urology unit, field of this research.

The data obtained subsidize educational and intervention proposals for UI in women and other researches on UI have been developed with the Center of Studies on Referred Morbidity and Management of the Work Process in Healthcare, at the School of Medical Sciences of São José do Rio Preto, SP, and other research in this context.

#### References

- 1. Fonseca ESM, Camargo ALM, Castro RA, Sartori MGF, Fonseca MCM, Lima GR et al. Validação do questionário de qualidade de vida (King's Health Questionaire) em mulheres brasileiras com incontinência urinária. Rev Bras Ginecol Obstet. 2005;27(5):235-42.
- 2. Higa R, Lopes MHBM. Restrições causadas pela incontinência urinária à vida da mulher. Rev Esc Enferm USP. 2006;40(1):34-41.
- 3. Skarpa QP, Herrmann V. Prevalência de sintomas do trato urinário inferior no 3º trimestre da gestação. Rev Bras Ginecol Obstet. 2005;27(2):98-100.
- 4.Sartori JP, Kawakami FT, Sartori MGF, Girão MJBC, Baracat EC, Lima GR. Distúrbios urinários no climatério: avaliação clínica e urodinâmica. Rev Bras Ginecol Obstet. 1999;21(2):77-81.
- 5. Abreu NS, Baracho ES, Tirado MGA, Dias RC. Qualidade de vida na perspectiva de idosas com incontinência urinária. Rev Bras Fisioter. 2007;11(6):429-36.
- 6. Minayo MC, Hartz ZMA, Buss PM. Qualidade de vida e saúde: um debate necessário. Ciênc Saúde Colet. 2000;5(1):7-18.
- 7. Auge AP, Zucchi CM, Costa FMP, Nunes K, Cunha LP, Silva PVF, et al. Comparações entre os índices de

- qualidade de vida em mulheres com incontinência urinária submetidas ou não ao tratamento cirúrgico. Rev Bras Ginecol Obstet. 2006;28(6):352-7.
- 8.Ribeiro JP, Raimundo A. Satisfação sexual e percepção de saúde em mulheres com incontinência urinária. Anál Psicol. 2005;3(23):305-14.
- 9. Rett MT, Simões JA, Herrmann V, Gurcel MSC, Morais SS. Qualidade de vida em mulheres após tratamento da incontinência urinária de esforço com fisioterapia. Rev Bras Ginecol Obstet. 2007;29(3):134-40.
- 10. Guarisi T, Pinto Neto AM, Osis MJ, Pedro AO, Paiva LHSC, Faúndes A. Procura de serviço médico por mulheres com incontinência urinária. Rev Bras Ginecol Obstet. 2001;23(7):439-43.
- 11. Silva APM, Santos VLCG. Prevalência da incontinência urinária em adultos e idosos hospitalizados. Rev Esc Enferm USP. 2005;39(1):36-45.
- 12. Higa R, Lopes MHBM, Reis MJ. Fatores de risco para incontinência urinária na mulher. Rev Esc Enferm USP. 2008;42(1):187-92.
- 13. Herrmann V, Potrick BA, Palma PCR, Zanettini CL, Marques A, Netto Júnior NR. Eletroestimulação transvaginal do assoalho pélvico no tratamento da incontinência urinária de esforço: avaliações clínica e ultra-sonográfica. Rev Assoc Méd Bras. 2003;49(4):401-15.
- 14. Aukee P, Usenius J-P, Kirkinen P. An evaluation of pelvic floor anatomy and function by MRI. Eur J Obstet Gynecol Reprod Biol. 2004;112(1):84-8.
- 15.Cannon TW, Wojcik EM, Ferguson CL, Saraga S, Thomas C, Damaser MS. Effects of vaginal distension on urethral anatomy and function. BJU Int. 2002;90(4)403-7.
- 16. Keane DP, O'Sullivan S. Urinary incontinence: anatomy, physiology and pathophysiology. Best Pract Res Clin Obstet Gynaecol. 2000;41(2):207-26.
- 17. Guarisi T, Pinto Neto AM, Osis MJ, Pedro AO, Paiva LHC, Faúndes A. Incontinência urinária entre mulheres climatéricas brasileiras: inquérito domiciliar. Rev Saúde Pública. out 2001;35(5):428-35.
- 18. Higa R, Lopes MHBM. The impact of urinary incontinence on female nursing personnel. Rev Bras Enferm. 2007;60(2):213-6.
- 19. Nygaard I, Girts T, Fultz NH, Kinchen K, Pohi G, Sternfeld B. Is urinary incontinence a barrier to exercise in women. Obstet Gynecol. 2005;106:307-14.
- 20. Lopes MHBM, Silva L. Incontinência urinária em mulheres: razões da não procura por tratamento. Rev Esc Enferm USP. 2009;43(1):72-8.
- 21. Higa R, Lopes MHBM, Turato ER. Psychocultural meanings of urinary incontinence in women: a review. Rev. Latino-Am. Enfermagem. 2008 Ago;16(4):779-86.
- 22. Fitzgerald S, Palmer MH, Berry SJ, Hart K. Urinary incontinence. Impact on working women. AAOHNJ. 2000;8(3):112-8.

- 23. Feldner PC Júnior, Sartori MGF, Lima GR, Baracat EC, Girão MJBC. Diagnóstico clínico e subsidiário da incontinência urinária. Rev Bras Ginecol Obstet. jan 2006;28(1):54-62.
- 24. Caetano AS, Tavares MCGCF, Lopes MHBM. Incontinência urinária e a prática de atividades físicas. Rev Bras Med Esporte. 2007;13(4):270-4.

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