

The impact of urinary incontinence on female nursing personnel

O impacto da incontinência urinária entre trabalhadoras de enfermagem

El impacto de la incontinencia urinaria entre trabajadoras de enfermería

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RESUMO

The prevalence of urinary incontinence (UI) was assessed, its interference in the performance of daily occupational activities and its management among the women's nurse staff of a medical school hospital in Campinas, São Paulo. Of the 291 employers, 27.5% reported UI complaint at least monthly. The activities that required greater effort increased the urinary loss, what resulted in stress, feeling embarrassed and lack of concentration at work. The use of pad was the most frequent strategy at management of UI and sometimes the task could not be interrupted to use the restroom. In conclusion, the activities that require more effort and the difficulty for an adequate management of the UI in workplace increase the problem and interfere on professional performance.

Descriptors: Urinary incontinence; Women's health; Nursing.

RESUMEN

Foi identificada a prevalência de incontinência urinária (IU), sua interferência nas atividades ocupacionais diárias e seu manejo entre mulheres profissionais de enfermagem de um hospital de ensino de Campinas, São Paulo. Entre 291 trabalhadoras, 27,5% relataram queixa de IU no mínimo mensalmente. As atividades que requeriam maior esforço aumentaram a perda urinária e eram responsáveis por estresse, vergonha e perda de concentração no trabalho. O uso de absorvente/forro foi a estratégia mais utilizada para manejar a IU e algumas vezes o trabalho não podia ser interrompido para uso do toalete. Conclui-se que as atividades de trabalho que exigem maior esforço físico e as dificuldades para um manejo adequado aumentam a IU e interferem no desempenho profissional.

Descritores: Incontinência urinária; Saúde da mulher; Enfermagem.

RESUMEN

Fue identificado la prevalencia de la incontinencia urinaria (IU), su interferencia en las actividades ocupacionales diarias y su manejo entre mujeres profesionales de enfermería de uno hospital escuela de Campinas, São Paulo. Entre 291 trabajadoras, 27,5% refirieron IU no mínimo mensalmente. Las actividades que requerían mayores esfuerzos aumentarían la pérdida de orina y fueran responsables por estrese, vergüenza y pérdida de la concentración en el trabajo. El protector íntimo fue lo más utilizado para minimizar la IU y algunas veces el trabajo no podía ser interrumpido para ir el baño. Es concluido que las actividades en el trabajo que exigen mayores esfuerzos físicos y las dificultades para hacer el manejo adecuado aumentaron la IU e interfieren en el desempeño profesional.

Descriptorios: Incontinencia urinaria; Salud de la mujer; Enfermería.

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1. INTRODUCTION

The International Continence Society (ICS) defined that "urinary incontinence (UI) is the complaint of any involuntary leakage of urine"⁽¹⁾.

The literature highlights prevalence between 14% and 46% in women aged between 20 and 89 years, presenting complaints of episodes that vary from sporadic to daily^(2,3).

The repercussions in the lifestyle of women with UI are numerous. Feelings of distress and incapacitating conditions have caused significant morbidity, affecting the quality of life of women of all ages, including those that are young and nulliparous. They usually suffer from physical, economic and psychosocial problems that interfere in their social, professional, sexual and family relationships. These problems contribute to restriction of daily living activities at home; loss of self-confidence; sexual dysfunction and limitations to performance of professional work⁽⁴⁻⁶⁾.

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As population aging is a result of decreased fertility and increased life expectancy, the number of working women going through menopause tends to grow and consequently the number of UI cases in this age group may likewise increase, aggravating restrictions imposed on occupational activities.

Among workingwomen, mainly those performing occupational activities that require intense physical activity, such as athletes, dancers and military women, studies pointed to indices that differ from those presented by the general female population. It was found that between 26.3% and 51.9% of young women from 19.9 to 32.2 years of age reported urine loss while participating in sport or exercise practice^(4,6-8). Even among working women who do not perform activities that require greater physical exertion, with ages equal to or lower than 50 years, UI presented prevalence indices of 25%^(9,10).

It was observed in the literature that there are no studies concerning nursing professionals. They are professionals that perform activities requiring physical exertion and frequently carry out tasks that cannot be interrupted. What would be the impact of UI on the private and occupational life of these women? This is the question that this study proposes to answer.

2. OBJECTIVES

- Assess the prevalence of complaints of UI.
- Identify the restrictions imposed by UI on the lifestyle of these women, the impairment caused by UI on occupational activity, how they manage UI, as well as the facilities and difficulties faced during the workday for UI management.

3. METHOD

A cross-section study was carried out. The population involved was all the female staff on the nursing team of a medical school hospital in the city of Campinas, SP, Brazil, who was working during the data collection period. The study population was composed of 378 employees. Were excluded the employees who were on leave of absence or medical leave and who refused to participate in the study.

The first phase of data collection identified the presence of UI that was evaluated in accordance with the report of urinary loss symptoms, by means of the question: "During the previous year, have you experienced urine loss (involuntary, in your underwear) at least monthly?"⁽¹⁰⁾.

In the second phase, working women with UI complaint were interviewed and the instrument utilized had as reference a study carried out by Fitzgerald⁽¹⁰⁾, where the authors investigated the occupational consequences and the type of management chosen by workingwomen.

The employees were asked whether UI caused any alteration in their lifestyle (restrictions on social, domestic, sexual and occupational activities); if some occupational activities increased the frequency of urine loss; which of the occupational activities aggravated the problem; whether they used any precaution to prevent incontinence during their professional activity; if the procedure utilized had ever caused any kind of health impairment; what was the frequency with which work had to be interrupted to use the restroom; how long did it take to use it; what was the distance to the restroom and what were the facilities and difficulties faced in the workday for UI management.

The Statistical Analysis System (SAS) System for Windows, a computer program, version 8.2. (SAS Institute Inc, 1999-2001, Cary, NC, USA) was used for the statistical study. After the first phase of data collection, UI prevalence was established.

Once the second phase of data collection was completed, the descriptive analysis was carried out and the absolute and relative rates of restriction imposed on lifestyle, UI obstacles to the performance of occupational activities, management method chosen, losses caused by inadequate

management, facilities and difficulties faced at work environment were established.

The participants in the study signed a Term of Free and Informed Consent and the Research Ethics Committee of the institution approved the project.

4. RESULTS

A total of 378 questionnaires were distributed, 301 of which were answered (79.6%) and ten eliminated, resulting in a sample composed of 291 participants (77%). The average age was 37 (DP: 10), varying from 19 to 66 year-old.

Of the employees who participated in the study, 80 (27.5%) complained that they had experienced involuntary urine loss at least once a month, in the previous year. During the second phase of research, 75 (93.8%) employees participated.

Most of the women (51 or 68%) reported that UI did not impose restrictions to their activities, the main complaints being related to occupational (18.7%), sexual (12%) and social (1.3%) activities. As regards domestic activities, no restrictions were reported, even those requiring more effort, such as house cleaning and doing the laundry.

The employees who complained of having occupational restrictions reported that UI interfered in activities performed daily and caused one or more involuntary loss episodes at work (Table 1). The women mentioned that the occupational restrictions were caused by the fact that they felt wet; smelled of urine; feared losing urine while on duty, since they were unable to interrupt tasks; by trying to withhold urine all the time or because they had to disrupt work frequently to go to the restroom and did not know what was happening (what had caused UI).

For approximately half of the employees (49%), the performance of some activities during the workday increased the frequency of UI (Table 2). The occupational activities that required greater effort increased the rate of UI at work, as carrying weight was the activity that most interfered in the increased frequency of urinary loss, next to pushing a gurney or incubator, a wheelchair and walking fast or running.

Among the employees with UI complaint, 25 (33.3%) used one or more strategies in an attempt to minimize urinary loss at work (Table 3).

The most frequently chosen, the use of lining or pad, required changing with a frequency that varied from none to five times during the shift. The women that resorted limiting fluid intake reported smaller liquid intake at night. The employees that used voiding schedules reported intervals from thirty minutes to six hours. The use of perfume or deodorant and a douche after urination had the purpose of avoiding the smell of urine.

Twelve employees (16%) mentioned having had some kind of detriment to their health as a result of the strategy employed, with some of the women complaining about more than one kind of problem. Among the main complaints, skin irritation (13.3%), ammonia dermatitis (9.3%) and allergy (1.3%) were a consequence of the use of lining or pad and occurred when there was a large amount of urine loss and the pad was wet for a long period of time. Urinary infection (9.3%) was considered a consequence of the reduction of liquid intake to decrease urinary loss.

Most of the 75 employees (61 or 82%) mentioned that there were one or more facilities available for UI management during working hours. The main convenience referred to was the possibility of going to the restroom and changing clothes, lining or pad during working hours (78.6%). Those who had their activities decreased by reason of sector transference (10.7%) reported that the activities at the Oncology Unit, Delivery Room and Central Sterile Supply required more intensive effort and, consequently, caused more urinary loss. These employees were transferred to other sectors and presented improvement of their urinary loss problem. Furthermore, the fact that in some cases there was a restroom at the new workplace contributed to lessen episodes of involuntary urine loss.

Table 1. Problems caused by urinary incontinence on working life (n= 75) - Campinas, SP – 2003

Problems	Frequency	
	n	%
Stress	8	10,6
Being upset, embarrassed, irritated and angry	5	6,7
Discomfiture, being uncomfortable and worried	5	6,7
Lack of concentration	2	2,7
Strange and very disagreeable sensation	2	2,7
Fatigue	1	1,3
Did not report occupational loss	61	81,3

Table 2. Activities that increased urinary loss frequency while performing the occupational activity (n= 75) - Campinas, SP – 2003.

Activities that increased urinary loss*	Frequency	
	n	%
Carrying weight	29	38,7
Pushing a gurney incubator	12	16,0
Pushing a wheelchair	11	14,7
Walking fast or running	9	12,0
Delay in going to restroom	2	2,7
Bathing the patients	2	2,7
Walking up and down the stairs	2	2,7
Working with water	1	1,3
Allergic cough	1	1,3
Contracting the abdomen in procedures	1	1,3
Stressing situation at work	1	1,3
None	38	50,7

* The employees mentioned one or more problems during occupational activities, which bring the total to over 100%.

Table 3. Management of urinary incontinence at work (n= 75) - Campinas, SP – 2003.

Strategy*	Frequency	
	n	%
Use of lining or pad	18	25,0
Limiting fluid intake	7	9,3
Voiding schedules	5	6,7
Use of perfume or deodorant	1	1,3
Douche after urination	1	1,3
None	50	66,7

* The employees mentioned one or more activities, which bring the total to over 100%.

One or more difficulties during the workday was concerning UI management were reported by most employees (73%). The women mentioned that they usually empty the bladder only at the time of arrival and departure, as they faced difficulties in interrupting work and forgot to empty the bladder. The difficulties more frequently reported were that sometimes (41.3%) or frequently (28%) the task could not be interrupted to use the restroom. In units where the distance to the restroom was greater than 12 meters, the employees complained that they had to postpone urination so that they would not be absent from their posts for very long (22.7%), which increased the frequency of "accidents", mainly during physical effort activities such as climbing stairs. They reported that their supervisors (1.3%) or the physicians (1.3%) did not like the work to be interrupted, mainly at units where rigorous control was required, such as the chemotherapy and surgical centers.

5. DISCUSSION

The present study had the participation of 77% of the nursing staff of the hospital concerned and identified a considerable rate of women with UI, namely 27.5%. This result was consistent with other investigations that found prevalence of 21%⁽⁹⁾ and 29%⁽¹⁰⁾ among workingwomen.

Thirty-two percent of the participants in the present study complained that UI imposed some kind of restriction on their lifestyle, mainly concerning

occupational and sexual activities. These indices were consistent in part with studies related to the general female population, which pointed to higher indices of restriction of social activities⁽⁵⁾. Since these women worked away from home, possibly UI did not prevent them from participating in social activities.

The daily exposure of their incontinence to workmates and the multidisciplinary team was the factor that most affected the employees, leading them to feel stressed. They felt that they were wet, smelled of urine and were unable to interrupt, or frequently interrupted, their work to go to the restroom. The lack of concentration at work occurred because they had to withhold urine all the time or felt uncomfortable due to the possibility of smelling of urine. Other feelings mentioned were: embarrassment, irritation, anger, discomfiture and preoccupation for being wet or smelling of urine. Such reports were similar to other investigations of female athletes or working women engaged in different occupational activities, who complained that the incontinence episodes during training and/or competition, as well as while performing occupational activities elicited feelings of embarrassment, anxiety, fear and interference with sleep, which led to fatigue and poor concentration at work; urine loss during the workday caused discomfiture, creating situations of embarrassment and emotional stress^(4,10).

It was observed that the activities requiring greater physical effort increased urinary loss: carrying weight; pushing wheelchairs, incubators and gurneys; activities that led to contraction of the abdomen, such as manual extraction of maternal milk and turning the bed crank; standing up for a long time; walking fast; walking up and down stairs. It is probable that a more acceptable posture would avoid the increase in intra-abdominal pressure and reduce the occurrence of urinary loss.

In fact, the workingwoman who has a job with limited breaks and access to the restroom, as well as those whose job requires lifting of weight is considered at risk for UI⁽⁹⁾.

The utilization of strategies to reduce urinary loss at work was one of the main concerns of the investigations already carried out. Among military women and professional dancers and athletes, common preventive measures such as keeping the bladder empty, using a lining or pad and fluid restriction were taken as a precaution before the more intensive physical activities; others reported that in addition to these maneuvers they avoided caffeine, changed clothes and wore deodorants^(6,7,9,10). In the present study, 33.3% of the employees resorted to some kind of strategy to minimize urinary loss during the workday. Due to the fact that most women reported that the amount of lost urine was small, the main strategy employed was the use of a lining or pad; fluid restriction was the second most used maneuver. Other strategies that posed a lower health risk were used less often: emptying the bladder at programmed intervals; wearing perfume/deodorant; taking a douche after urination and never leaving the bladder full.

The literature has shown that many women do not use adequate UI management during the workday⁽⁷⁾. Fluid restriction, an often used strategy, is harmful since the adequate intake of fluids is necessary to eliminate residues that cause bladder irritation, and dehydration plays an important role in the onset of urinary infection⁽⁹⁾.

For a more efficient management during the workday, being able to use the restroom, change clothes or change the lining/pad, as well as transference to another sector with reduction of activities that require greater physical exertion and having a restroom close to the workplace are facilitating factors. This was also made clear in other investigations, in which the working women reported easy access to a restroom and no limitations imposed on frequency of use were facilitating measures for UI control⁽¹¹⁾.

During the workday, some obstacles to interrupting work to use the restroom were reported. In units with a restroom nearby, such as the surgical room, delivery room and nursery the main difficulties mentioned were that sometimes or oftentimes the task may not be interrupted. In the study conducted by Fitzgerald⁽¹⁰⁾, 69% of the women were allowed to interrupt work twice a day; although 78% used the restroom more often

than permitted by the official breaks, most of them (87%) were not allowed to interrupt work and use the restroom. When they needed to use the restroom more often than the officially allowed breaks, they considered it to be a problem (76%), requested assistance from others to be able to leave (16%), 3% reported that they were not allowed to leave and just withheld the urine, while the boss was always looking at the clock.

The reduced number of investigations with working women makes it more difficult to acknowledge UI as a problem that affects occupational activities and the establishment of preventive measures at the workplace. In Brazil, the interference of UI in the quality of life has been investigated; however, occupational problems have not been the object of such studies. Further studies should be carried out having as objective the implementation of preventive measures, treatment and adequate management of UI in order to improve the productivity and quality of life of these women.

6. IMPLICATIONS FOR PRACTICE

The results show that some difficulties faced at the workplace increase urinary loss and cause greater occupational restrictions; therefore, preventive measures could be adopted with the purpose of improving self-care and enhancing the productivity of these women. A few considerations and suggestions could help in the establishment of better working conditions, as well as in achieving better professional performance:

a) An aggravating factor of urinary loss during the workday was the physical layout of the units. In almost every unit the restroom is located more than 12 meters away. In the units where the restroom is nearby, there is only one restroom for the entire multidisciplinary team, which is not enough.

b) Aspects to must be considered by the administration of the hospital:

the best adequacy of the physical plant with restrooms more nearby from workplace; to offer conditions for utilization of official breaks for restroom use; to avoid activities that require greater physical exertion and encourage the adoption of ergonomic posture in the performance of activities that increase intra-abdominal pressure.

c) Helping the incontinent employee to better understand her problem and to seek appropriate management that is not harmful to her health is an important factor for enhanced professional performance; accordingly, employee orientation should include these aspects.

7. CONCLUSION

a) The present study concerned and identified 27.5% of women with UI of the nursing staff of the hospital. Thirty-two percent of the participants in the present study complained that UI imposed some kind of restriction on their lifestyle, mainly concerning occupational and sexual activities.

b) It was observed that the activities requiring greater physical effort increased urinary loss: carrying weight; pushing wheelchairs, incubators and gurneys; activities that led to contraction of the abdomen; walking fast; walking up and down stairs.

c) The women utilize strategies to reduce urinary loss at work, such as keeping the bladder empty, using a lining or pad, fluid restriction were taken, emptying the bladder at programmed intervals; wearing perfume/deodorant; taking a douche after urination and never leaving the bladder full.

c) The daily exposure of their incontinence to workmates and the multidisciplinary team was the factor that most affected the employees, leading them to feel stressed. They felt that they were wet, smelled of urine and were unable to interrupt, or frequently interrupted, their work to go to the restroom.

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