

Urinary incontinence and female sexual function: an integrative review of validated questionnaires

Incontinência urinária e função sexual feminina: revisão integrativa de questionários validados

Incontinencia urinaria y función sexual femenina: revisión integrativa de cuestionarios validados

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Abstract

Objective: To analyze the national and international scientific production regarding the relationship between the ICIQ-UI-SF (International Consultation on Incontinence Questionnaire – Urinary Incontinence/Short Form (ICIQ-UI/SF) and FSFI (Female Sexual Function Index) in the female population.

Methods: Integrative literature review, carried out from December 2017 to May 2018, in the Scielo, Lilacs, Scopus and Pubmed databases. Searches were conducted through the association of the names of the questionnaires as descriptors, without delimitations regarding the year of publication, language, and availability of full text. Findings with a level of evidence of at least 3A for observational studies were prioritized. There was a total of five scientific papers.

Results: The evidence found about the direct relationship of the instruments had as predominant objective their application to validate the effectiveness of surgical techniques to correct urinary incontinence. Even with the improvement of incontinence, the findings were different regarding the improvement of sexual function, showing changes only in some FSFI domains, or no change. Only one study sought to investigate the direct relationship of the instruments, indicating a poor connection. On the other hand, the isolated search of the instruments, associated with specific descriptors, indicated that urinary incontinence is a determining factor for the deterioration of both quality of life and sexual function.

Conclusion: The low number of productions and results found have shown that a deeper understanding of the subject is necessary for a justification and qualification of care for patients with urinary incontinence.

Resumo

Objetivo: Analisar a produção científica nacional e internacional quanto à relação entre os instrumentos ICIQ-UI-SF (Internacional Consultation on Incontinence Questionnaire – Urinary Incontinence/Short Form (ICIQ-UI/SF) e FSFI (Female Sexual Function Index) na população feminina.

Métodos: Revisão integrativa da literatura, realizada durante os meses de Dezembro de 2017 a Maio de 2018, nas bases de dados Scielo, Lilacs, Scopus e Pubmed. As buscas foram conduzidas através da associação dos nomes dos questionários como descritores, sem delimitações quanto ao ano de publicação, idioma e disponibilidade em texto completo. Priorizados os achados com nível de evidência de no mínimo 3A para estudos observacionais. Totalizaram 5 artigos científicos.

Resultados: As evidências encontradas sobre a relação direta dos instrumentos apresentaram como objetivo predominante a sua aplicação para validar a efetividade de técnicas cirúrgicas para a correção da incontinência urinária. Mesmo diante da melhora da incontinência, os achados divergiram quanto a melhora da função sexual, apresentando modificações apenas em alguns domínios do FSFI ou nenhuma mudança. Apenas um estudo buscou investigar a relação direta dos instrumentos, indicando fraca ligação. Já a busca isolada dos instrumentos, associada com descritores específicos apontara que a incontinência urinária é fator determinante para a deterioração tanto da qualidade de vida quanto e da função sexual.

Conclusão: O baixo quantitativo de produções e resultados encontrados demonstraram que é necessário um maior aprofundamento sobre a temática, para um embasamento e qualificação da assistência para portadoras de incontinência urinária.

Resumen

Objetivo: Analizar la producción científica nacional e internacional en cuanto a la relación entre los indicadores de los ICIQ-UI-SF (ICIQ-UI / SF) y FSFI (Female Sexual Function Index) en la población femenina.

Métodos: Durante los meses de diciembre de 2017 a mayo de 2018, se realizó una revisión integrativa de la literatura en las bases de datos Scielo, Lilacs, Scopus y Pubmed. Las búsquedas se hicieron a través de la asociación de los nombres de los cuestionarios como descriptores, sin delimitaciones en cuanto al año de publicación, idioma y disponibilidad en texto completo. Se priorizaron hallazgos con nivel de evidencia de por lo menos 3A para estudios observacionales. Hubo un total de 5 artículos científicos.

Resultados: Las evidencias encontradas sobre la relación directa de los instrumentos presentaron como objetivo predominante su aplicación para validar la efectividad de técnicas quirúrgicas para la corrección de la incontinencia urinaria. Incluso ante la mejora de la incontinencia, los hallazgos divergían en cuanto a la mejora de la función sexual, presentando modificaciones sólo en algunos dominios del FSFI o ningún cambio. Solo un estudio buscó investigar la relación directa de los instrumentos e indicó débil conexión. La búsqueda aislada de los instrumentos, asociada con descriptores específicos, apunta que la incontinencia urinaria es un factor determinante para el deterioro tanto de la calidad de vida como de la función sexual.

Conclusión: La poca cantidad de producciones y resultados encontrados demostró que es necesario una mayor profundización sobre la temática para una base y calificación de la asistencia para portadoras de incontinencia urinaria.

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Introduction

Several challenges permeate health care of the female population with pelvic floor disorders. Models of care focused only on the pathological aspects of these conditions promote the perpetuation of psychosocial data in their carriers. Among them, urinary incontinence (UI) is defined as a condition where there is some involuntary loss of urine. Since 1998 it is no longer considered as only a symptom, becoming part of the International Classification of Diseases (ICD/WHO).⁽¹⁾ It has a multifactorial etiology, where conditions such as advanced age, traumatic lesions to the pelvic floor, obesity, menopause, hereditary factors, chronic diseases, great-impact physical exercises, smoking and use of specific medications are some of the factors that may favor its occurrence.⁽²⁾

It is not a condition associated with risk of death; however, it is capable of generating an extreme impact on the lives of women affected. Besides the clinical impairment, living with UI may become a determinant of social isolation, anxiety and depression symptoms, and self-esteem impairment.⁽³⁾

Due to the numerous specificities of such a health condition, it is necessary to provide differential care, which assists these women and the purely clinical aspects of UI. As alternatives for the accomplishment of broader care, there is the strategy of applying specific questionnaires. Since 1997, it has been recommended that quality of life measures be included in all clinical UI surveys as an additional complement to traditional clinical parameters.⁽⁴⁾

Among the specific questionnaires for UI, we can cite the International Consultation on Incontinence Questionnaire - Urinary Incontinence/Short Form (ICIQ-UI/SF). It was translated and culturally adapted in Brazil by Guillemín in 2004.⁽⁵⁾ It has domains that comprehend both the characterization of quantification complaints, frequency and moments in which urinary losses take place, and the subjectivity of the women affected, through her perception of how much such a condition impairs her life. A differential look at such fields translates into quality care for these women.⁽⁶⁾

One of the fields of life affected by UI, usually little discussed, is related to sexuality. Such a term

usually has a direct relation to the sexual act itself, but its meaning is broader because it involves the broad subjectivity of the human being. Its construction is based on social, cultural aspects, beliefs and ideologies and its experience can be directly affected by the presence of a disease such as urinary incontinence. The understanding of the experience of sexuality in the face of the coexistence of limitations resulting from urinary losses allows the construction of specialized and qualified care that they need so much. Late and ineffective approaches to this relevant issue can lead to consequences such as the complete withdrawal of sexual life by these women.⁽⁷⁾

Current diagnostic proposals for the issue seek to understand and act on it in a more comprehensive way, contemplating sexual problems in spheres that go beyond clinical reductionist perspectives, by focusing on the dimensions of the carriers' subjectivity.⁽⁸⁾ The questionnaires' approach also arises in this theme as a differential care strategy, in which the Female Sexual Function Index (FSFI), which contemplates the multidimensional nature of female sexual function, stands out. It is easy to apply, having six specific domains and 19 questions; through it, subjective perceptions are transformed into quantifiable objective information, allowing better knowledge and action on the part of health-care professionals.⁽⁷⁾

It is essential to reflect and discuss the relationship between these two aspects of women's health, addressed by these questionnaires that are closely connected, for the qualification of care provided to these women. The following question then arises: What is the scientific evidence presented in the national and international literature on the relationship between the ICIQ-UI / SF and the FSFI? Such uneasiness is justified by the need for such women to take care of their biopsychosocial sphere, which is so affected by living with UI, and that such areas cannot be neglected to the detriment of reductionist care, aiming only at clinical aspects. Knowing what has already been done on the subject is the first step in the foundation of adequate care for female urinary incontinence patients. Therefore, the study aims to analyze the national and international scientific production regarding the relation

between the ICIQ-UI / SF and FSFI scores in the female population.

Methods

To achieve the proposed objective, an integrative literature review was carried out. The initial step was based on the daily multiprofessional experience of the researchers in the approach of women with urinary incontinence. It initially culminated with the concern about the need for a differential approach in the field of urinary incontinence and sexuality, thus raising the following research problem: What is the scientific evidence presented in the national and international literature on the relationship between the ICIQ-UI / SF and the FSFI in the female population?

Guided by the recommendations of PRISMA, the search for evidence in the electronic databases was started. The authors used the results found in Scielo, PubMed, Scopus, and Lilacs, from December to May 2018. In order to show the direct interconnection of the questionnaires, the searches were through the use of their names as descriptors as follows: (“ICIQ-UI/SF”) AND (“FSFI”). Considering the low quantitative results found, another decision was to combine the descriptors in the format (“ICIQ-SF”) AND (“FSFI”), thus leading to other findings that also included the theme. Searches were conducted without limitations regarding time, language and complete availability in electronic media. The level of evidence of at least 3 A for observational studies according to the Oxford classification was used for the findings.

Considering the results found, studies related to the following were excluded: urinary incontinence among men, overactive bladder, and pelvic organs prolapse. Those which did not focus mainly on urinary incontinence as the main theme of the study, treating it as a secondary event in the presence of any other affection, were excluded. In addition to the application of these criteria, evidence for which the full text was not available for analysis and those that did not contemplate the level of evidence desired were not included.

After applying the conditions mentioned, the quantitative results listed in chart 1 were obtained.

Chart 1. Quantitative aspects of the results found

Database	Quantitative of findings found
Scielo	02
PubMed	13
Scopus	13
Lilacs	13

The steps for inclusion of findings are listed below. It is important to highlight the exclusion of a single full-text eligible article from the Scopus database because, after its acquisition, it was found that it did not address the objectives of this study (Figure 1).

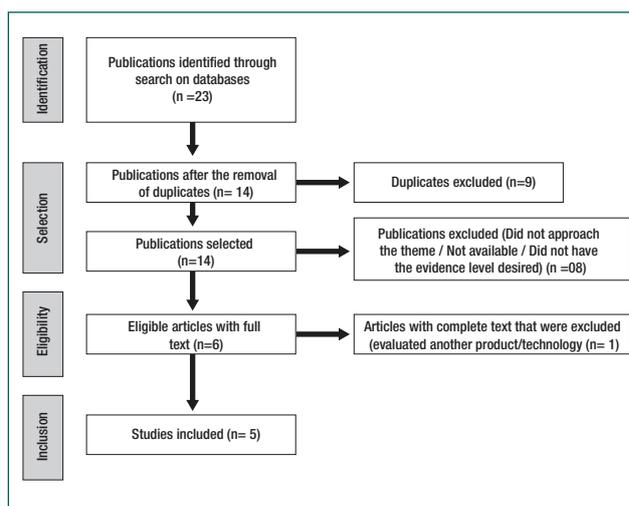


Figure 1. Sample articles

The findings were grouped in a table and, for greater detailing of the production found, they were categorized as: title, journal, place, year of publication, population, inclusion and exclusion criteria, and main findings. These specific points of information extraction were collected through an instrument adapted from Ursi,⁽⁹⁾ aiming at its better organization and discussion with relevant literature.

Results

The search for studies addressing the relationship between the scores of the ICIQ-UI-SF and FSFI instruments resulted in five scientific articles, produced between the years 2006 and 2018, in differ-

ent countries, predominantly in the medical-surgical area, with the main objective of application of both questionnaires to validate the effectiveness of surgical techniques and correction of urinary losses.

The studied population was women with urinary incontinence, who were awaiting some modality of procedure to correct their urinary losses. Among the inclusion criteria, the presence of stress urinary incontinence and active sexual life were prevalent. As an exclusion criterion, there was a consensus among the studies regarding the presence of urgent urinary incontinence, clinical conditions that made it impossible to answer the questionnaires, and the presence of higher degrees of pelvic organ prolapse.

Only one study emphasized the exclusion of women using antidepressant medications, antipsychotics and beta blockers, relating them as direct influencers of the sexual response. The mean sample among the studies was 91 participants.

The main modality was that of descriptive and cross-sectional studies. There was a predominance of improvement in the scores of incontinence severity; however, a standard result among the scores indicative of improved sexual functioning was not viewed. No study sought to investigate whether there was a direct relationship among the results of the questionnaires.

The main scientific evidence is listed in chart 2.

Chart 2. Results of scientific evidence of the relationship of ICIQ-UI/SF and FSFI scores

Title	Journal	Place and year	Study type	No. of participants/inclusion and exclusion criteria	Main findings
Evaluación de la función sexual femenina antes y después de un procedimiento para la corrección de la incontinencia urinaria de esfuerzo ⁽¹⁰⁾	Actas Urológicas Españolas<0}	Venezuela, 2006	Prospective	30 participants awaiting surgical procedure - Inclusion criteria: Female, sexually active patients, who had stress urinary incontinence. - Exclusion criteria: Women in the postmenopausal period, with previous surgeries for correction of urinary incontinence, without fixed sex partners, psychiatric and cognitive changes that prevented them from answering the questionnaires.	- Application of the ICIQ-UI/SF and FSFI questionnaires before and after the operation. - By tracing pre- and postoperative comparisons, there was an improvement in the ICIQ-UI/SF score and no change in the FSFI.
The effects of stress incontinence on women's sexual function and life quality ⁽¹¹⁾	Archives of Italian Urology and Andrology	Turkey, 2016	Descriptive and cross-sectional	81 participants awaiting surgical procedure - Inclusion criteria: Female, sexually active patients, who had stress urinary incontinence. - Exclusion criteria: Patients with pelvic organs prolapse, previous diagnosis of sexual dysfunction, use of antidepressants, antipsychotics, beta blockers, lack of sexual activity.	- Splitting of the sample into two groups of specific treatment approaches to urinary incontinence - ICIQ-UI/SF and FSFI were applied in the pre- and postoperative period - Improvement only in the ICIQ-UI/SF scores, no effect was seen in the FSFI scores.
Female sexual function following a novel transobturator sling procedure without paraurethral dissection (modified-TOT) ⁽¹²⁾	International Brazilian Journal of Urology	Turkey, 2017	Descriptive and cross-sectional	88 participants - Inclusion criteria: Female, sexually active patients, with stress urinary incontinence, who were waiting for a surgical procedure - Exclusion criteria: History of surgery for correction of urinary incontinence or pelvic reconstruction, psychiatric or neurological diseases, with pelvic prolapse above grade 1.	- FSFI and ICIQ-UI/SF performed preoperatively and three months after surgery. - Postoperative ICIQ-UI/SF, lower than in the preoperative period. - Improvement in the two groups in the following FSFI domains: excitation, lubrication and orgasm.
Impact of transobturator vaginal tape on female stress urinary incontinence and sexual function ⁽¹³⁾	Arab Journal of Urology	Egypt, 2017	Descriptive and cross-sectional	145 participants Inclusion criteria: - Female, sexually active patients, who had stress urinary incontinence. Exclusion criteria: - Hyperactive bladder, pelvic organ prolapse at grade 3 or 4, mixed urinary incontinence with predominance of urge incontinence, vaginal infections, prior surgery for correction of urinary incontinence and/or pelvic organ prolapse, malignancy of female genital organs	- Participants evaluated before and after six months of the procedure, with the application of the ICIQ-UI/SF and the FSFI - Improvement of FSFI scores after surgery.
Non-ablative Er:YAG laser therapy effect on stress urinary incontinence related to quality of life and sexual function: A randomized controlled trial ⁽¹⁴⁾	European Journal of Obstetrics, Gynecology and Reproductive Biology	Slovenia, 2018	Randomized clinical trial	114 participants Inclusion criteria: - Sexually active female patients, with at least one vaginal birth, with a diagnosis of stress urinary incontinence Exclusion criteria: - Pelvic organ prolapse above grade 1 (POP-Q classification), inability to contract pelvic muscles, mixed urinary incontinence, urge urinary incontinence, prior gynecological surgeries	- The women were divided into two groups, one receiving laser intervention and the other placebo group. - After three months of treatment, the group receiving the treatment had significant improvements in ICIQ-UI / SF and FSFI scores in relation to the group that did not receive intervention.

Discussion

The existing evidence found in the results does not allow us to establish certainties that the improvement of urinary incontinence is directly linked to an improvement in FSFI scores, given some divergent data found, where there was improvement in only some domains or no improvement. This result does not disqualify the surgical technique used; however, it makes us reflect that when we understand the female sexual function as an interaction of several factors, where the most complex are those linked to their subjectivity, such women are only a translation of the reductionist contemplation of the clinical aspect of the disease, being a victim of neglect of their psychosocial aspect that will keep suffering bad consequences.⁽¹⁵⁾

The low quantitative found on this subject, which required differential searches for its deepening, demonstrates the need for more studies focused on the relation of between the ICIQ-UI/SF and the FSFI. The findings demonstrate the lack of approaches for these women other than those applied only when in a surgery setting. Oliveira⁽¹⁶⁾, in a study carried out in a basic health unit on the prevalence of urinary incontinence in climacteric women, sought to characterize them as for socio-demographic and health history aspects, and showed that a broader view on who is cared for allows a better targeting of assistance since basic care.

Discussing sexuality, where different cultures permeate a series of stigmatized conceptions is not something simple. When it is associated with a condition such as urinary incontinence, which generates several psychosocial changes for its carriers, this fact becomes even more complex. This combination often goes unnoticed by professionals who are not yet fully qualified for this approach with their patients, mainly because they also bring barriers with them that do not allow them to see the urgency of approaching issue with these women, either in their personal educational, due to personal and professional cultural aspects, based on purely clinical care without focusing on the comprehensiveness of those they assist.⁽¹⁷⁾

Without adequate support for a proper approach to this issue of sexuality in the context of urinary incontinence, even with the correction of symptoms, we will continue to see women victims of a distorted social and caring culture and misconceptions that will make them keep the feeling of inability of their full expression as human beings. Knowing and discussing what has been done in the area for this context provides the subsidy and the hope of differential care for them.

As limitations for the development of this review, something that called our attention, due to the relevance of this issue, was the low amount of scientific productions carried out on this theme and that this reality is global. It is also worth noting that in addition to not addressing this issue in scientific research, a predominance of the medical category in researching the subject was evidenced. The greatness of the specificities of this important relationship of urinary incontinence and sexual dysfunction deserves a multiprofessional view differentiated by the different professions that provide health care so these women are offered truly effective care in their lives.

Conclusion

The analysis, reflection, and discussion of the productions about the relationship between the instruments ICIQ-UI/SF and FSFI showed that, even in the face of a topic relevant to the health of the female population, we still have a superficial and fragmented view of the subject worldwide. The findings reinforce the fact that it is undeniable that there is a need for further study on the subject, to base care, and its consequent qualification for assistance to patients with urinary incontinence, given the numerous consequences that they may have if this does not occur.

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References

- Abrams P, Cardozo L, Fall M, Griffiths D, Rosier P, Ulmsten U, et al.; Standardisation Sub-Committee of the International Continence Society. The standardisation of terminology in lower urinary tract function: report from the standardisation sub-committee of the International Continence Society. *Urology*. 2003;61(1):37–49.
- Higa R, Lopes MH, dos Reis MJ. Fatores de risco para incontinência urinária na mulher. *Rev Esc Enferm USP*. 2008;42(1):187–92.
- Lopes MH, Higa R. Restrições causadas pela incontinência urinária a vida da mulher. *Rev Esc Enferm USP*. 2006;40(1):34–41.
- Blaivas JG, Appell RA, Fantl JA, Leach G, McGuire EJ, Resnick NM, et al. Standards of efficacy for evaluation of treatment outcomes in urinary incontinence: recommendations of the Urodynamic Society. *Neurourol Urodyn*. 1997;16(3):145–7.
- Tamanini JT, Dambros M, D'Ancona CA, Palma PC, Rodrigues Netto N Jr. Validação para o português do "International Consultation on Incontinence Questionnaire— short Form" (ICIQ-SF). *Rev Saude Publica*. 2004;38(3):438–44.
- Herrmann V, Di Sessa RG, Ricceto CL, Morais SS, Castro EB, Juliato CR. Associação entre o escore do International Consultation on Incontinence Questionnaire: Urinary Incontinence/Short Form e a Avaliação Urodinâmica em mulheres com incontinência urinária. *Rev Bras Ginecol Obstet*. 2013;35(1):16–20.
- Pacagnella RC, Martinez EZ, Vieira EM. Validade de construto de uma versão em português do Female Sexual Function Index. *Cad Saude Publica*. 2009;25(11):2333–44.
- Basson R, Leiblun S, Brotto L, Derogatis L, Fourcroy J, Fugl-Meyer K, e Graziottin A, Heiman JR, Laan E, Meston C, Schover L, van Lankveld J, Schultz WW. Definitions of women's sexual dysfunction reconsidered: advocating expansion and revision. *J Psychosom Obstet Gynaecol*. 2003;24(4):221–9.
- Ursi ES, Gavão CM. Prevenção de lesões de pele no perioperatório: revisão integrativa da literatura. *Rev Lat Am Enfermagem*. 2006;14(1):124–31.
- Thiel R., Thiel M., Dambros M., Riccetto C., López V., Rincón M.E. et al . Evaluación de la función sexual femenina antes y después de un procedimiento para la corrección de la incontinencia urinaria de esfuerzo. *Actas Urol Esp*. 2006;30(3): 315-320.
- Tuncer M, Tarhan F, Kafkasli A, Demir K, Yucetas U, Faydaci G, Eryldirim B, Sarika K. The effects of stress incontinence surgery on sexual function and life quality of women. *Arch Ital Urol Androl*. 2016 Jul 4;88(2):106-10
- Arslan B, Onuk O, Eroglu A, Gezmis TC, Aydin M. Female sexual function following a novel transobturator sling procedure without paraurethral dissection (modified-TOT). *Int. braz j urol*. 2017; 43(1): 142-149.
- Soliman T, Sherif H, Fathi A, Kandeel W, Abdelwahab O. Impact of transobturator vaginal tape on female stress urinary incontinence and sexual function. *Arab J Urol*. 2017 Dec; 15(4): 380–386.
- Blaganje M, Šćepanović D, Žgur L, Verdenik I, Pajk F, Lukanović A. Non-ablative Er:YAG laser therapy effect on stress urinary incontinence related to quality of life and sexual function: A randomized controlled trial. *Eur J Obstet Gynecol Reprod Biol*. 2018 May;224:153-158
- Queiroz MA, Crisóstomo LR, Coelho MM, Miranda KC, Barbosa RG, Bezerra ST. Representações sociais da sexualidade entre idosos. *Rev Bras Enferm*. 2015;68(4):662–7.
- Oliveira TM, Valdez FM, Lima KE, Magalhaes MS, Abdon AP, Bezerra IN. Prevalência de incontinência urinária e fatores associados em mulheres no climatério em uma unidade de atenção primária à saúde. *Rev Bras Promoção Saúde*. 2015;28(4):606–12.
- Thiel RR, Dambros M, Palma PC, Thiel M, Riccetto CL, Ramos MF. Tradução para português, adaptação cultural e validação do Female Sexual Function Index. *Rev Bras Ginecol Obstet*. 2008;30(10):504–10.