

Continence

Current Awareness Bulletin

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1. Urinary Tract Infections Amongst Adults With Intellectual Disabilities With Urinary Incontinence

Authors: Finlayson, Janet;Gore, Nick;Ord, Paul;Roche, Fiona;Butcher, John;Kean, Ryan and Skelton, Dawn A.

Publication Date: 2025

Journal: Journal of Applied Research in Intellectual Disabilities : JARID 38(1), pp. e13317

Abstract: Background: Between 26% and 52% of adults with intellectual disability experience urinary incontinence (UI). Little is known about the implications of urinary tract infections (UTIs) for this group. The aim was to screen for UTIs in a sample of adults with intellectual disability and UI.; Method: Twenty adults with intellectual disability and UI recruited via community intellectual disability health care teams and provided a urine sample. Each sample was tested for the presence of UTI bacteria.; Results: Half of the sample were found to have a possible or probable UTI. Nine adults had also been treated for a UTI within the previous 12 months; six adults had more than once.; Conclusion: UTIs appear to be very common amongst adults with intellectual disability and UI, and careful attention to UTI symptoms, screening and treatment options for this group are recommended. Larger studies on UTI prevalence and associated factors are also warranted.; Trial Registration: ClinicalTrials.gov: NCT05626062. (© 2024 The Author(s). Journal of Applied Research in Intellectual Disabilities published by John Wiley & Sons Ltd.)

2. Prevalence and determinants of depression among women with urinary incontinence: a systematic review and meta-analysis worldwide

Authors: Abebe, Sileshi Ayele;Gashaw, Fanuel;Tsegaye, Alebachew;Abebaw, Dessie;Kindie, Endeshaw Asaye and Dejen, Addisu Minaye

Publication Date: 2024

Journal: BMC Women's Health 24(1), pp. 591

Abstract: Background: There is no pooled evidence regarding the prevalence and potential factors associated with depression among women with urinary incontinence worldwide. Hence, a systematic review and meta-analysis were conducted to determine the overall prevalence of depression among urinary incontinent women globally and explore any heterogeneity present.; Methods: A computerized systematic literature search was performed using the Scopus, PubMed, Embase, Google Scholar, and Snowballing databases. Each database was searched from its start date of March 20, 2023. The study conforms to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines. All included articles were published in English and evaluated the prevalence and associated factors of depression among urinary incontinent female patients. Pooled estimations with a 95% confidence interval (CI) were calculated with the DerSimonian–Laird (DL) random-effects model. Publication bias was evaluated by using funnel plots and statistical tests.; Results: Our initial electronic database search with the chosen search terms identified 1120 articles in PubMed (354), Embase (105), Scopus (325) and Google Scholar (176). The results of the 8 studies reporting a binary outcome using the different validation scales are summarized in the overall prevalence of depression was 18% (95% CI = 11-25%). Unable to read and write (OR: 1.34, 95% CI: 1.01, 1.78], $I^2 = 0\%$), caesarean delivery (OR: 1.48, 95% CI: 1.30, 1.70], $I^2 = 0\%$), obesity (OR: 1.37, 95% CI: 1.19, 1.58], $I^2 = 0\%$), party greater than three (OR: 1.26, 95% CI: 0.98, 1.62], $I^2 = 0\%$), comorbidity (OR: 1.32, 95% CI: 1.16, 1.49], $I^2 = 85.3\%$), smoking (OR: 1.58, 95% CI: 0.99, 1.92], $I^2 = 0\%$) and single, divorced and widowed (OR: 1.67, 95% CI: 1.45, 1.92], $I^2 = 0\%$) were the major factors associated with depression.; Conclusion and Recommendations: This review demonstrated the high prevalence of depression among women with urinary incontinence. Being unable to read and write, delivery via caesarean section, obesity, having more than three children, having comorbidities, smoking, being single, being divorced and being widowed were all associated factors. This study identified that there was a strong association between urinary incontinence and depression. Future studies recommend focusing on the causal association

between depression and urinary incontinence.; Prospero: Registration numbers of CRD42023418779.
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3. Incontinence After Prostate Treatment: What Does the Future Hold?

Authors: Breyer, Benjamin N.;Vanni, Alex J. and Westney, O. L.

Publication Date: 2024

Journal: The Journal of Urology 212(6), pp. 910–911

4. An update on surgical management for stress urinary incontinence

Authors: Gallo, Kelsey;Weiner, Hillary and Mishra, Kavita

Publication Date: 2024

Journal: Current Opinion in Obstetrics & Gynecology 36(6), pp. 433–438

Abstract: Purpose of Review: Stress urinary incontinence (SUI) is a common condition for which women often opt for surgical management. Synthetic midurethral slings (MUS) have been the dominant treatment for decades. Single-incision slings (SIS) have been introduced to lower the morbidity associated with trocar passage during MUS placement. Urethral bulking has been used less frequently owing to its lower cure rates. New data have recently emerged in support of single-incision slings (SIS) and urethral bulking with Bulkamid polyacrylamide hydrogel (PAHG).; Recent Findings: Several studies with a follow-up ≥ 10 years have shown stable efficacy and complication rates of retropubic (RMUS) and transobturator (TMUS) midurethral slings over time. SIS products show equivalent efficacy to traditional TMUS and RMUS at up to 3 years of follow-up and can be placed under local anesthesia. While urethral bulking with PAHG results in lower cure rates compared to slings, satisfaction rates are high and responders have sustained improvement at 7 years follow-up.; Summary: All three types of available slings, TMUS, RMUS, and SIS, are now considered appropriate surgical options for the treatment of SUI. Although the absence of comparative data precludes a formal recommendation for one injectable over another, urethral bulking with PAHG has favorable long-term results and an excellent safety profile. (Copyright © 2024 Wolters Kluwer Health, Inc. All rights reserved.)

5. Urinary incontinence, faecal incontinence and pelvic organ prolapse symptoms 20-26 years after childbirth: A longitudinal cohort study

Authors: Hagen, S.;Sellers, C.;Elders, A.;Glazener, C.;MacArthur, C.;Toozs-Hobson, P.;Hemming, C.;Herbison, P. and Wilson, D.

Publication Date: 2024

Journal: BJOG : An International Journal of Obstetrics and Gynaecology 131(13), pp. 1815–1823

Abstract: Objective: To investigate pelvic floor dysfunction (PFD; urinary incontinence (UI), faecal incontinence (FI) and prolapse) ≥ 20 years after childbirth and their association with delivery mode history and demographic characteristics.; Design: Cohort study with long-term follow-up.; Setting: Maternity units in Aberdeen and Birmingham (UK) and Dunedin (NZ).; Population: Women giving birth in 1993/1994.; Methods: Postal questionnaires at 20 (New Zealand) or 26 (United Kingdom) years after index birth (n = 6195). Regression analyses investigated associations between risk factors and UI, FI and prolapse symptoms.; Main Outcome Measures: Prevalence of self-reported UI, FI, 'something coming down' from or in the vagina (SCD), and the Pelvic Organ Prolapse-Symptom Score, and relationships with delivery method.; Results: Thirty-seven per cent (n = 2270) responded at 20/26 years, of whom 61% reported UI (59% of whom reported more severe UI), 22% FI and 17% prolapse symptoms. Having only caesarean section (CS) was associated with a significantly lower risk of UI (OR 0.63, 95% CI 0.46-0.85), FI (OR 0.63, 95% CI 0.42-0.96) and SCD (OR 0.44, 95% CI 0.27-0.74)

compared to only spontaneous vaginal deliveries (SVDs). Having any forceps delivery was associated with reporting FI compared to only SVDs (OR 1.29, 95% CI 1.00-1.66), but there was no association for UI (OR 0.95, 95% CI 0.76-1.19) or SCD (OR 1.05, 95% CI 0.80-1.38). Higher current BMI was associated with all PFD outcomes.; Conclusions: Prevalence of PFD continues to increase up to 26 years following index birth, and differences were observed according to delivery mode history. Exclusive CS was associated with less risk of UI, FI and any prolapse symptoms. (© 2024 The Author(s). BJOG: An International Journal of Obstetrics and Gynaecology published by John Wiley & Sons Ltd.)

6. How Useful are Current Chatbots Regarding Urology Patient Information? Comparison of the Ten Most Popular Chatbots' Responses About Female Urinary Incontinence

Authors: Malak, Arzu and Şahin, Mehmet Fatih

Publication Date: 2024

Journal: Journal of Medical Systems 48(1), pp. 102

Abstract: This research evaluates the readability and quality of patient information material about female urinary incontinence (fUI) in ten popular artificial intelligence (AI) supported chatbots. We used the most recent versions of 10 widely-used chatbots, including OpenAI's GPT-4, Claude-3 Sonnet, Grok 1.5, Mistral Large 2, Google Palm 2, Meta's Llama 3, HuggingChat v0.8.4, Microsoft's Copilot, Gemini Advanced, and Perplexity. Prompts were created to generate texts about UI, stress type UI, urge type UI, and mix type UI. The modified Ensuring Quality Information for Patients (EQIP) technique and QUEST (Quality Evaluating Scoring Tool) were used to assess the quality, and the average of 8 well-known readability formulas, which is Average Reading Level Consensus (ARLC), were used to evaluate readability. When comparing the average scores, there were significant differences in the mean mEQIP and QUEST scores across ten chatbots ($p = 0.049$ and $p = 0.018$). Gemini received the greatest mean scores for mEQIP and QUEST, whereas Grok had the lowest values. The chatbots exhibited significant differences in mean ARLC, word count, and sentence count ($p = 0.047$, $p = 0.001$, and $p = 0.001$, respectively). For readability, Grok is the easiest to read, while Mistral is highly complex to understand. AI-supported chatbot technology needs to be improved in terms of readability and quality of patient information regarding female UI.; Competing Interests: Declarations Ethical Statement No ethical approval was needed because this is not a human study, but only online information was used. Conflict of Interest None of the authors received any type of financial support that could be considered potential conflict of interest regarding the manuscript or its submission. Competing Interests The authors declare no competing interests. (© 2024. The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature.)

7. Transobturator hybrid tape versus synthetic tape in treatment of female stress urinary incontinence: A prospective randomized clinical study

Authors: Mansy, Islam;Elsayed, Diab;Saafan, Ahmed;Abouhashem, Safwat E.;Eliwa, Ahmed M.;Samaha, Ibrahim Ismael and Taha, Kareem M.

Publication Date: 2024

Journal: Urologia , pp. 3915603241293838

Abstract: Objective: To compare the clinical and operative outcomes of transobturator hybrid tape versus synthetic tapes during mid-urethral sling in treating female stress urinary incontinence (SUI).; Patients and Methods: This prospective randomized study included 63 women with SUI. Patients were categorized into two groups: Group I included 32 patients who underwent midurethral sling procedure using hybrid tape; and Group II included 31 patients that had synthetic sling, using transobturator tape approach (TOT) in both groups. Two patients in group I lost to follow up and one patient in group II lost to follow up. The primary endpoint was the safety of sling erosion and major complications. The 2ry endpoint was the efficacy that was assessed objectively by the Cough stress test and subjectively by

International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form (ICIQ-UI-SF) and this was assessed at 1, 6, and 12 months. The following variables were compared: operative time, post-operative pain scores, duration of indwelling urethral catheter, hospital stay, and quality of life (QoL) assessment (International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form ICIQ-UI-SF) assessing the continence status before and after discharge from hospital.; Results: Patients among the two groups were normally distributed with no statistical significant difference in patient's demographic data and comorbidities. The hybrid tape procedure had a longer mean (SD) operative time of 45.3 ± 3.6 min, which was longer than that of synthetic tape procedure, at a mean (SD) of $29.5 \pm (3.5)$ min. This increase was statistically significant ($p < 0.001$). The mean time to return to normal activity was significantly shorter in Group II patients compared to those in Group I. Overall cure rate (defined as no more episodes of SUI or pad use) was statistically insignificant in both groups being 86.7% and 83.3% respectively. No bladder, vascular, nervous or intestinal injuries were encountered in either group. Pain was significantly higher in hybrid tape (Group I). Post operative urgency, and urge incontinence rates were not significantly different between in both groups. Two cases in group 1 and one case in the other group, and these cases were managed by medical treatment. Vaginal sling erosion was encountered in one case in group II which was managed by sling removal.; Conclusion: Hybrid tape may be considered as a treatment option during TOT for female SUI with comparable efficacy and safety to synthetic tape. Long term follow up should be considered.; Competing Interests: Declaration of conflicting interestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

8. The prognostic value of cystography-measured bladder capacity on very early continence rates after radical prostatectomy

Authors: Mladen, Stankovic and Bastian, Schumacher

Publication Date: 2024

Journal: Urologia , pp. 3915603241293839

Abstract: Purpose: To assess the utility and reliability of cost-effective cystography-measured bladder capacity as a prognostic tool for predicting very early continence recovery following radical prostatectomy. Additionally, the study aims to discuss the clinical implications of the findings, including their potential impact on patient management, postoperative rehabilitation strategies, and the development of personalized care pathways for prostate cancer patients.; Methods: In this prospective monocentric study, we analyzed 223 patients who underwent either robot assisted radical prostatectomy (RARP) or open radical prostatectomy (ORP) between January 2022 and January 2024. Postoperative cystography was routinely performed 5 days after robot-assisted radical prostatectomy and 7 days after open radical prostatectomy. Very early continence rates were determined using a standardized pad-test conducted on the first day following catheter removal. The bladder capacity during cystography was measured and documented for every patient. The correlation between the rate of continence recovery and the bladder capacity was then assessed. To determine other predictive factors for recovery of continence, several parameters were analyzed using multivariate logistic regression analysis, including age, prostate volume, nerve-sparing technique and surgical procedure.; Results: Urinary continence rates at day 1 after catheter removal were 73.5% for patients who underwent RARP and 72.6% for patients who underwent ORP. A strong prognostic value of cystography-measured bladder capacity on very early continence rates was reported ($p < 0.001$), with a cut-off value calculated to be 140 ml of bladder capacity. After adjusting for additional variables such as age, surgical procedure, prostate volume and nerve-sparing technique, multivariate linear model analysis still found a strong correlation between cystography-measured bladder capacity and very early continence rates ($p < 0.001$).; Conclusions: The cystography-measured bladder capacity may be a good predictor of the recovery of post-prostatectomy urinary continence.; Competing Interests: Declaration of conflicting interestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

9. Faecal incontinence: investigation, treatment and management

Authors: Nazarko, Linda

Publication Date: 2024

Journal: British Journal of Community Nursing 29(11), pp. 528–534

Abstract: Faecal incontinence is a hidden problem that is often under-reported, under-diagnosed, under-investigated and under-treated. Faecal incontinence is more common in women and older people. Its prevalence also increases with age. Faecal incontinence occurs because of a complex interplay of contributing factors, some of which can be reversed in primary care without the need for specialist investigations and treatment. This article explores the reasons why adults develop faecal incontinence and how to identify and treat reversible causes in primary care. It also provides information on specialist treatment and the management of intractable faecal incontinence. A structured approach to assessment and management is key in identifying problems and offering primary care for timely treatment.

10. The future of patient education: A study on AI-driven responses to urinary incontinence inquiries

Authors: Rotem, Reut;Zamstein, Omri;Rottenstreich, Misgav;O'Sullivan, Orfhlaith,E.;O'reilly, Barry,A. and Weintraub, Adi Y.

Publication Date: 2024

Journal: International Journal of Gynaecology and Obstetrics: The Official Organ of the International Federation of Gynaecology and Obstetrics 167(3), pp. 1004–1009

Abstract: Objective: To evaluate the effectiveness of ChatGPT in providing insights into common urinary incontinence concerns within urogynecology. By analyzing the model's responses against established benchmarks of accuracy, completeness, and safety, the study aimed to quantify its usefulness for informing patients and aiding healthcare providers.; Methods: An expert-driven questionnaire was developed, inviting urogynecologists worldwide to assess ChatGPT's answers to 10 carefully selected questions on urinary incontinence (UI). These assessments focused on the accuracy of the responses, their comprehensiveness, and whether they raised any safety issues. Subsequent statistical analyses determined the average consensus among experts and identified the proportion of responses receiving favorable evaluations (a score of 4 or higher).; Results: Of 50 urogynecologists that were approached worldwide, 37 responded, offering insights into ChatGPT's responses on UI. The overall feedback averaged a score of 4.0, indicating a positive acceptance. Accuracy scores averaged 3.9 with 71% rated favorably, whereas comprehensiveness scored slightly higher at 4 with 74% favorable ratings. Safety assessments also averaged 4 with 74% favorable responses.; Conclusion: This investigation underlines ChatGPT's favorable performance across the evaluated domains of accuracy, comprehensiveness, and safety within the context of UI queries. However, despite this broadly positive reception, the study also signals a clear avenue for improvement, particularly in the precision of the provided information. Refining ChatGPT's accuracy and ensuring the delivery of more pinpointed responses are essential steps forward, aiming to bolster its utility as a comprehensive educational resource for patients and a supportive tool for healthcare practitioners. (© 2024 The Author(s). International Journal of Gynecology & Obstetrics published by John Wiley & Sons Ltd on behalf of International Federation of Gynecology and Obstetrics.)

11. Evaluating the efficacy of physiotherapy in post-prostatectomy continence and pelvic muscle function

Authors: Tang, Wei-Zhen;Xu, Wei-Ze and Liu, Tai-Hang

Publication Date: 2024

Journal: BJU International

12. A study to untangle the puzzle of urinary incontinence and frailty co-occurrence among older adults: The roles of depression and activity engagement

Authors: Wang, Chun-Yan;Peng, Si-Jing;Zhao, Meng;Wu, Chen and Wang, Ke-Fang

Publication Date: 2024

Journal: Journal of Advanced Nursing (John Wiley & Sons, Inc.) 80(11), pp. 4584–4592

Abstract: Aims: To explore the co-occurrence of urinary incontinence and frailty by testing the roles of depression and activity engagement guided by the mechanisms of common cause and interaction pathways. Design: A secondary analysis of a 1-year three-wave panel data collected from older nursing home residents in China. Methods: Changes in depression and activity engagement were regressed on urinary incontinence and frailty incidence underpinned by the common cause mechanism of chronic conditions co-occurrence, and these changes were also taken as mediators linking from frailty to urinary incontinence incidence supported by the interaction pathways' mechanism. Results: A total of 348 older adults were included in this study, and 55.7% were women. The co-occurrence of urinary incontinence and frailty was found in 16.7% of the participants at baseline. Older adults with sole frailty at baseline had almost twice the rate of incident urinary incontinence (32.7%) compared with those without (16.7%) over a 1-year period. The subsample analyses showed that changes in depression and activity engagement failed to significantly predict the incidence of urinary incontinence and frailty. The mediating roles of these changes linking frailty to urinary incontinence incidence were also not statistically significant. Conclusion: The co-occurrence of urinary incontinence and frailty is prevalent in older nursing home residents. Older adults with frailty at baseline are more likely to develop urinary incontinence a year later. The common cause and interaction pathways mechanisms for the co-occurrence of urinary incontinence and frailty were not verified with changes in depression and activity engagement. Implications for the Profession and/or Patient Care: The phenomenon of urinary incontinence and frailty co-occurrence should be given extreme emphasis. Although statistically significant findings on the roles of depression and activity engagement were not inferred, this study provides multiple possibilities for future studies to test and depict a clear picture of this co-occurrence. Impact: What problem did the study address? This study was designed to test the roles of depression and activity engagement in predicting the incidence of urinary incontinence and frailty, and the mediating roles in linking frailty to urinary incontinence incidence. What were the main findings? Despite the methodological pitfalls in literature have been addressed, neither depression nor activity engagement would significantly predict the incidence of urinary incontinence and frailty in older adults. Their mediating roles in linking frailty to urinary incontinence incidence were also not significant. Where and on whom will the research have an impact? Our findings add important pieces of evidence to promote researchers' understanding and provide an important basis for untangling the puzzle of urinary incontinence and frailty co-occurrence. Reporting Method: The report of this study followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement guidelines. Patient or Public Contribution: No patient or public contribution.

13. Stable pelvic floor muscle training improves urinary incontinence in women with gestational diabetes mellitus

Authors: Wu, Yingying;Li, Tingting;Cai, Fengcheng;Ye, Xinru and Xu, Mengyan

Publication Date: 2024

Journal: Journal of Obstetrics and Gynaecology : The Journal of the Institute of Obstetrics and Gynaecology 44(1), pp. 2420192

Abstract: Background: Gestational diabetes mellitus (GDM) is a common metabolic disease that contributes to urinary incontinence (UI) in pregnant women. The aim of this study was to investigate the therapeutic potential of stable pelvic floor muscle (PFM) training with transverse abdominal muscle for pregnancy-specific UI in patients with GDM.; Methods: This was a randomised controlled trial. A total of

73 pregnant women with GDM and pregnancy-specific UI were screened, 35 of whom received stable PFM training with transverse abdominal muscle in the second trimester. After six weeks of training, UI status was assessed by the quantity of fluid loss and the International Consultation on Incontinence Questionnaire short form (ICI-Q-SF), and the quality of life was evaluated by the Incontinence Quality of Life Questionnaire score. Additionally, the thickness of the transverse abdominal muscle was measured by ultrasonography.; Results: At 6 weeks later, the quantity of fluid loss and ICI-Q-SF score were significantly lower, and the overall healing rate was significantly higher in the training group than those in the control group. The training also significantly improved the quality of life, especially in terms of behavioural limitation and psychosocial impact. Additionally, the thickness of transverse abdominal muscle under the status of maximal contractions of transverse abdominal muscle and PFM was significantly higher in the training group than in the control group after 6 weeks.; Conclusions: Stable PMF training with transverse abdominal muscle alleviated UI and improved the quality of life in patients with GDM. The thickening of transverse abdominal muscle induced by the training contributes to the remission of UI through the cooperation of PMF.

Sources Used

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