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16. Heyns CF, Marais DC. Prospective evaluation of the American Urological Association symptom index and peak urinary flow rate for the followup of men with known urethral stricture disease. *J Urol*. 2002;168:2051-2054.
17. Erickson BA, Breyer BN, McAninch JW. The use of uroflowmetry to diagnose recurrent stricture after urethral reconstructive surgery. *J Urol*. 2010;184:1386-1390.
18. Badia X, Garcia-Losa M, Dal-Re R. Ten-language translation and harmonization of the International Prostate Symptom Score: developing a methodology for multinational clinical trials. *Eur Urol*. 1997;31:129-140.
19. Bailey A, Martin ML, Girman C, et al. Development of a multiregional United States Spanish version of the International Prostate Symptom Score and the Benign Prostatic Hyperplasia impact index. *J Urol*. 2005;174:1896-1901.
20. Plante M, Corcos J, Gregoire I, et al. The international prostate symptom score: physician versus self-administration in the quantification of symptomatology. *Urology*. 1996;47:326-328.
21. Bozlu M, Doruk E, Akbay E, et al. Effect of administration mode (patient vs physician) and patient's educational level on the Turkish version of the International Prostate Symptom Score. *Int J Urol*. 2002;9:417-421.
22. Heyns CF, Steenkamp JW, De Kock ML, et al. Treatment of male urethral strictures: is repeated dilation or internal urethrotomy useful? *J Urol*. 1998;160:356-358.
23. Ferguson GG, Bullock TL, Anderson RE, et al. Minimally invasive methods for bulbar urethral strictures: a survey of members of the American Urological Association. *Urology*. 2011;78:701-706.
24. van Leeuwen MA, Brandenburg JJ, Kok ET, et al. Management of adult anterior urethral stricture disease: nationwide survey among urologists in the Netherlands. *Eur Urol*. 2011;60:159-166.
25. Greenwell TJ, Castle C, Andrich DE, et al. Repeat urethrotomy and dilation for the treatment of urethral stricture are neither clinically effective nor cost-effective. *J Urol*. 2004;172:275-277.
26. Rapp DE, Chanduri K, Infusino G, et al. Internet survey of management trends of urethral strictures. *Urol Int*. 2008;80:287-290.
27. Bullock TL, Brandes SB. Adult anterior urethral strictures: a national practice patterns survey of board certified urologists in the United States. *J Urol*. 2007;177:685-690.
28. Wong SS, Narahari R, O'Riordan A, et al. Simple urethral dilation, endoscopic urethrotomy, and urethroplasty for urethral stricture disease in adult men. *Cochrane Database Syst Rev*. 2010;4:CD006934.
29. Mundy AR, Andrich DE. Urethral strictures. *BJU Int*. 2011;107:6-26.
30. Aydos MM, Memis A, Yakupoglu YK, et al. The use and efficacy of the American Urological Association Symptom Index in assessing the outcome of urethroplasty for post-traumatic complete posterior urethral strictures. *BJU Int*. 2001;88:382-384.

EDITORIAL COMMENT

Urethral stricture disease affects men of all education levels and backgrounds around the world. Urethral stricture prevalence is thought to be higher in developing countries in which literacy and access to care might be limited.¹ Validated instruments for assessing men with urethral stricture disease would be helpful to track voiding symptoms, assess need for intervention, and compare research results.

The present study uses the 4-question visual prostate symptom score (VPSS) described by van der Walt et al.¹ The VPSS and International Prostate Symptom Score (IPSS) were administered to 100 men referred to a urethral stricture clinic, 41 of whom had 7 years of less formal schooling. These studies were readministered to 78 men during follow-up. Urethral calibration and uroflowmetry were also measured. Uroflowmetry with maximum urinary flow rate <15 mL/s demonstrated

a positive predictive value of 83% for urethral stricture measuring 18 F or less. VPSS >8 and maximum urinary flow rate <15 mL/s increased the positive predictive value to 87%.

A sixth grade reading level is considered necessary to understand the questions asked in the IPSS,² and incongruent answering of the IPSS compared with actual lower urinary tract symptoms is related to lower educational level.^{3,4} To help address the effect of educational level on IPSS, visual prostate symptom scores have been developed and validated.^{1,5} The concept of a visual patient-reported outcome measure is particularly appealing for providers working in areas with low literacy rates and diverse cultures and languages such as an inner-city urology clinic such as ours at San Francisco General Hospital.

Versions of VPSS include a visual analog scale with pictures of happy to increasingly sad faces for all 7 questions in the IPSS⁵ and a 4-question VPSS with pictures demonstrating daytime and nighttime urinary frequency and force of urinary stream and a visual analog scale to rate quality of life.¹ The 4-question version of the VPSS has been validated with regards to IPSS scores and uroflowmetry measurements.⁶

Future efforts to expand on the present work could involve psychometric validation of the instrument across cultures. Psychometric validation testing includes assessment of "known groups validity" in which VPSS scores from low, medium, and severe voiding symptom patient groups are compared and assessment of "within person change over time" to assess differences in a single patient's scores at different time points.⁷

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References

1. van der Walt CLE, Heyns CF, Groeneveld AE, et al. Prospective comparison of a new visual prostate symptom score versus the international prostate symptom score in men with lower urinary tract symptoms. *Urol*. 2011;78:17-20. doi.org/10.1016/j.urology.2011.01.065.
2. MacDiarmid SA, Goodson TC, Holmes TM, et al. An assessment of the comprehension of the American Urological Association Symptom Index. *JURO*. 1998;159:873-874.
3. Johnson TV, Abbasi A, Ehrlich SS, et al. Patient misunderstanding of the individual questions of the American Urological Association symptom score. *J Urol*. 2008;179:2291-2294; discussion 2294-5. doi.org/10.1016/j.juro.2008.01.140.
4. Netto Júnior NR, de Lima ML. The influence of patient education level on the International Prostatic Symptom Score. *JURO*. 1995;154:97-99.
5. Ushijima S, Ukimura O, Okihara K, et al. Visual analog scale questionnaire to assess quality of life specific to each symptom of the International Prostate Symptom Score. *JURO*. 2006;176:665-671. doi.org/10.1016/j.juro.2006.03.031.
6. Heyns CFC, van der Walt CLEC, Groeneveld AEA. Correlation between a new visual prostate symptom score (VPSS) and uroflowmetry parameters in men with lower urinary tract symptoms. *S Afr Med J*. 2012;102:237-240.
7. Elkin E. Are You in Need of Validation? Psychometric Evaluation of Questionnaires Using SAS. *SAS Global Forum*; Paper 426-2012, <http://support.sas.com/resources/papers/proceedings12/426-2012.pdf>, 2012.

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