

ABSTRACT

Introduction: Undescended testicle (UDT) is one of the most common pediatric urologic problems, however, is often a source of confusion for parents when deciding when to treat, when to observe, and when nothing needs to be done. Shared decision-making (SDM) has been identified as a key component to improving patient care and outcomes. While patient decision aids have been shown to improve SDM, their use in pediatric urology has not been well-studied. This study measures parents' perceptions about the SDM process and evaluates whether an educational video can improve the SDM process in the setting of initial consultation for UDT.

Study Design: Randomized control study of patients aged 0-18 years old and their parents presenting to the urology clinic at a single institution with a referral diagnosis of UDT. Parental perception of SDM during the visit was measured through the shared decision-making questionnaire (SDMQ9). Mean SDMQ9 scores were examined between the intervention group in which parents viewed an educational video on UDT prior to consultation with the urology provider and a control group in which parents received standard care.

Results: 258 patients presenting between February 2019 and April 2022 were included in the study; 144 were randomly assigned to the control group and 114 were assigned to the intervention group. Mean scores on the SDMQ9 were not statistically different between the intervention and control groups (91.9 vs 85.6, $p=0.077$). Responses were

significantly improved in one individual question: “My doctor and I thoroughly weighed the different treatment options” ($p=0.041$).

Conclusion: In parents of children referred for UDT, use of an educational video prior to discussions with a provider did not increase overall perception of the shared decision-making process, but did improve perception in a single aspect of the process. Our findings suggest that decision aids, such as educational videos, may be less useful in improving the SDM process in this setting, although further research is needed to optimize these interventions.

Keywords: Undescended testicle, cryptorchidism, shared decision-making, decision aid

Summary Table

Characteristic		Total	Video		p-value
			No	Yes	
Total		100.0% (258)	55.8% (144)	44.2% (114)	
My doctor made clear that a decision needs to be made.	Mean	4.5	4.3	4.6	0.373
	Std Dev	1.1	1.3	0.8	
My doctor wanted to know exactly how I want to be involved in making the decision.	Mean	4.4	4.3	4.6	0.186
	Std Dev	1.1	1.3	0.9	
My doctor told me there are different options for treating my medical condition.	Mean	4.2	4.0	4.5	0.069
	Std Dev	1.3	1.5	0.8	
My doctor precisely explained the advantages and disadvantages of the treatment options.	Mean	4.4	4.3	4.6	0.265
	Std Dev	1.1	1.3	0.7	
My doctor helped me understand all the information.	Mean	4.6	4.5	4.7	0.269
	Std Dev	1.0	1.1	0.8	
My doctor asked me which treatment option I prefer.	Mean	4.3	4.1	4.5	0.078
	Std Dev	1.3	1.4	1.0	
My doctor and I thoroughly weighed the different treatment options.	Mean	4.3	4.1	4.5	0.041
	Std Dev	1.2	1.4	0.9	
My doctor and I selected a treatment option together.	Mean	4.5	4.3	4.7	0.104
	Std Dev	1.1	1.3	0.8	
My doctor and I reached an agreement on how to proceed.	Mean	4.6	4.5	4.7	0.349
	Std Dev	1.0	1.1	0.7	
Overall SDM9 Score	Mean	88.4	85.6	91.9	0.077
	Std Dev	19.9	22.9	14.6	