HIGH SCHOOL EDITION
Journal of Student Research
Volume 14 Issue 1 (2025)

Enhancing Patient Education and Satisfaction Through Video for Novel Surgeries in Urology Outpatient Care

Tomoki Haga[1] and Sean Hanratty[#]

[1]Ritsumeikan Keisho High School, Japan
[#]Advisor

ABSTRACT

Patient satisfaction is a vital metric for evaluating healthcare quality, especially in urology outpatient units serving predominantly elderly patients. Extended waiting times and limited staff availability can contribute to patient stress and dissatisfaction. While traditional communication methods, such as Patient Information Leaflets (PILs), aim to bridge knowledge gaps, they often fall short due to their complexity and the need for higher health literacy. This study explores the use of video as an alternative educational tool to address these challenges. A seven-minute video was created to educate patients about benign prostatic hyperplasia (BPH) and a novel surgical treatment. The video, featuring automated and real-voice narration, provided a structured overview of treatment strategies, the surgical procedure, and expected outcomes. It was shown on a loop in waiting areas and made accessible through the hospital's intranet. Patient feedback was collected via a questionnaire, measuring satisfaction, comprehension, and overall impressions using a 5-point Likert scale. Among 895 participants, 85% agreed that the video effectively utilized waiting time, while 81% felt it improved their understanding of treatment options. Notably, 59% reported an increased interest in pursuing surgical therapy after watching the video. Results indicate that videos are a highly effective medium for enhancing patient comprehension, engagement, and satisfaction compared to traditional PILs. By proactively addressing communication gaps, video education reduces patient anxiety and enriches the outpatient experience. Future research could extend this approach to other medical specialties to further improve patient-centered care.

Introduction

Patient-reported satisfaction is a critical goal in hospital services as it reflects the quality-of-care patients receive. The urology outpatient unit typically serves an elderly population, many of whom face cognitive challenges. Waiting for extended periods in the waiting room can be stressful, and the situation is often exacerbated by prolonged waiting times and busy staff who may be occupied with various administrative duties.

Pilot work involving patient questionnaires was conducted to assess levels of patient satisfaction and identify areas where care might not meet patient expectations. Patient satisfaction is achieved when care meets or exceeds individual expectations, and clear communication early in the process significantly contributes to this satisfaction. Patient Information Leaflets (PILs), which outline medical treatments and conditions, are a common tool for patient education. However, they are often limited by fixed complexity levels and may not address varying health literacy among patients. Effective patient education extends beyond readability to encompass comprehension and application of medical information.

Traditional communication in healthcare relies heavily on verbal and written methods, which can overwhelm patients, especially when explaining surgical procedures. Patients often retain limited information despite signing consent forms.

Given these challenges, video provides an intuitive alternative to PILs, as it can simplify complex medical information through visuals rather than text. To offer more effective and standardized information, we introduced videos explaining diseases and surgical procedures.

Videos offer a familiar and accessible format for most people, whether the purpose is to guide patients on surgical procedures or provide general health advice. However, the effectiveness of video interventions in enhancing patient understanding remains under explored. A systematic review by Abed et al. (2014) on the impact of video on health behaviors concluded that while evidence of behavioral change is inconclusive, videos featuring real people in real scenarios tend to be more successful than straightforward instructional formats.

This study aims to assess the effectiveness of video as an educational tool for explaining a novel surgical therapy. A video was created to provide a clear, accessible overview of a new surgical treatment, displayed in waiting areas. Patient understanding and satisfaction were measured using a self-reported questionnaire after watching the video. The study seeks to evaluate whether video can enhance patient comprehension and satisfaction compared to traditional methods like PILs.

Materials and Methods

Creation of the Video and Feedback Collection

The goal of this project was to enhance patient satisfaction among those attending the urology outpatient division through the use of a patient information video. The initial information collected in the pilot phase included factors such as wait time and patient experiences in the outpatient setting. Based on the pilot study results, a decision was made to create a patient information video utilize waiting time and enhance understanding of surgical treatment. The video, lasting seven minutes, provided a concise overview of treatment expectations for patients with benign prostatic hyperplasia (BPH). The content was structured to be educational and covered the following key topics: BPH treatment strategy and concepts, a description of the patient journey, an outline of the novel surgical procedure, and a summary of the anticipated benefits—all explained concisely. Audio was a mix of automated narration and real-voice explanations from a doctor, making the content more accessible and understandable.

The video was played on a television monitor in the outpatient waiting area on a loop every 15 minutes and was also accessible on the hospital intranet, where patients could review the information at their convenience.

Measures

The primary outcome measure was patient satisfaction, assessed via a self-reported questionnaire. The questionnaire contained six questions assessing patients' subjective opinions on the video, rated on a patient satisfaction score on a scale using a 5-point Likert scale, where 5 indicated " Excellent " and 1 indicated " Very Poor." A sample of the questionnaire items is shown in Table 1.

Table 1. Sample section of the patient questionnaire administered after watching the video.

	Please check the relevant box for the following statements:	Excellent	Good	Average	Poor	Very Poor
1.	Was this video clear and informative?	5	4	3	2	1
2.	Was this video easy to watch?	5	4	3	2	1
3.	Was this video helpful while you are waiting?	5	4	3	2	1
4.	Did it help you to understand the surgical procedure?	5	4	3	2	1
5.	Did you get interested in the surgery?	Yes		N/A		No
6.	Were you interested in watching other videos like this?	Yes			No	

Participation in the questionnaire was voluntary, and responses were fully anonymized. Questionnaires were provided in the outpatient admission packs along with an explanation of the study. Patients were instructed to return completed questionnaires by placing them in a collection box at reception, which was retrieved by the study team at the end of each day.

For prospective analysis of the video acceptance, the patients were categorized into two groups of the video without or with verbal explanation, and compared the rate of the patients who watched the video in each group. The data collected was quantitative and is presented as mean scores. Given the small sample size, normal distribution was not assumed; therefore, a Fisher exact test was used to assess statistical significance.

Ethical Considerations

To ensure that feedback did not influence patient care, strict measures were taken to maintain anonymity, thereby providing a safe and comfortable environment for patients to give honest responses.

Results

A total of 895 participants completed the questionnaire. The mean age was 70.5 years. The sample was, with 89.8% male (n = 803) and 10.2% female (n = 91). Patients generally rated the video content favorably, and most patients expressed satisfaction with the clarity and comprehensibility of the video-based patient information system.

85.1% agreed the overall video played was clear and informative (Q1). 83.8% thought the video was easy to watch and understand (Q2). For 79.4% of the patients, the video worked well to effectively use the waiting time (Q3). 80.7% felt that it improved their understanding of the treatment expectations(Q4). Most notably, 58.9% of participants indicated that the video enhanced their understanding of the upcoming surgery and become interested in taking surgical therapy(Q5). 80.0% would have appreciated viewing additional informational videos before undergoing other surgical procedures (Q6).

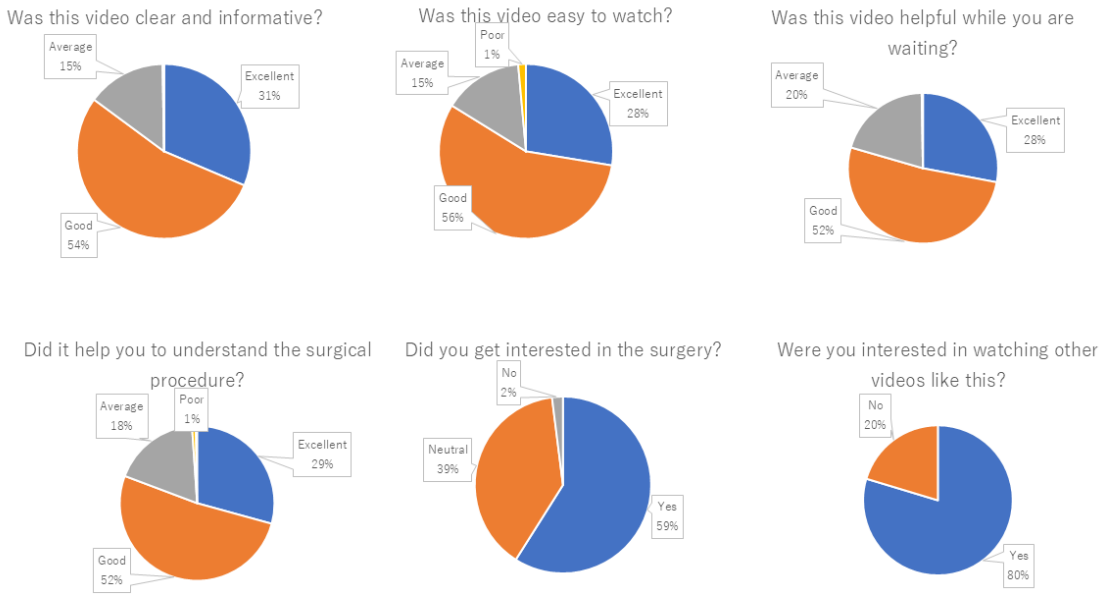

Figure 1. Displays a pie chart of the questionnaire results.

Not all patients viewed the video while in the waiting area. However, in the second week, the video was played with an audible system, leading to increase in viewership compared to the first week when initially played without sounds (first cycle: 79.0% of patients, second cycle: 98.0% of patients). ($p< 0.05$, Fisher exact test).

Discussion

This project successfully enhanced patient satisfaction by introducing an educational video aimed at addressing patient-focused challenges during visits to the urology outpatient division. Specifically, it improved understanding of treatment strategies for BPH, including novel surgical procedures, and set clear expectations for the standard of care.

Patient satisfaction and perceptions of the care they receive are critical components of quality assurance. A significant proportion of healthcare complaints stem from inadequate communication. Addressing patient preferences and expectations is, therefore, essential for improving the patient experience.

During the pilot phase of this study, extended waiting times in the urology outpatient department were identified as a significant issue. However, the practical challenges of delivering care in busy outpatient units often prevent healthcare providers from dedicating sufficient time to each patient. Educational tools like videos can help mitigate these challenges by improving patient engagement and understanding during wait times.

A review of 65 studies on the use of video for patient education found that 48 studies reported positive outcomes, highlighting the effectiveness of video interventions. This project contributes to this growing evidence base, demonstrating how an informational video can reduce patient stress related to long waits while simultaneously improving comprehension of medical concepts, particularly unfamiliar or novel surgical procedures.

The primary aim of this project was to enhance patient understanding of BPH and its surgical treatments while utilizing waiting times more effectively. The video allowed patients to feel more engaged by proactively communicating relevant information and increasing the perceived value of the service. This aligns with findings from prior research, which suggest that leveraging waiting times for patient education can improve satisfaction.

Through the use of a straightforward seven-question questionnaire, we analyzed patients' perceptions of the video's audio and visual content. As anticipated, the video proved effective in alleviating the burden of waiting, providing meaningful engagement, and enhancing patients' understanding of BPH treatment and the surgical

procedure. Some patients reported that the video encouraged them to consider the surgical treatment and facilitated subsequent discussions with their doctors.

The positive feedback underscores the advantages of audiovisual materials over traditional PILs in educating patients about complex surgical procedures. Videos are particularly beneficial because they offer a more dynamic and accessible way of presenting medical information, making it easier for patients to grasp key concepts. Furthermore, the implementation of video-based education is relatively simple for hospitals and contributes to increased patient satisfaction while reducing the workload of hospital staff.

In conclusion, this project demonstrates that incorporating patient information videos into outpatient care workflows can address communication gaps, improve patient education, and enhance the overall patient experience. Future studies could explore expanding the use of videos to other medical specialties and procedures to build on these promising results.

Acknowledgments

I would like to thank the staff at Sanjukai Urologic Hospital in Sapporo, Japan for giving me this opportunity to edit this patient information video and while performing research on this questionnaire, enabling me to brainstorm, finalize, and analyze my data.

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