Impact of an Educational Podcast for Patients with Chronic Pelvic Pain

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1.0 Background

Chronic pelvic pain and endometriosis can negatively impact quality of life and is associated with increased social isolation and loneliness (1). Patients with chronic pelvic pain frequently experience a delay of 8 years prior to receiving a diagnosis, report feeling ignored by medical professionals, and experience stigma related to seeking care (2). When patients do see specialists and receive a diagnosis, ambulatory clinical visits are limited by time, availability, and location of providers. Podcasts are a format to deliver narrative educational content in an asynchronous and flexible manner and represent an adjunct to patient education that can improve patient knowledge, comprehension and engagement (3).

References:
1. Calvi, C., et al. (2024). "Loneliness and Perceived Social Support in Endometriosis: The Roles of Body Image Disturbance and Anticipated Stigma." International Journal of Behavioral Medicine 31(3): 433-444.

2. De Corte, P., et al. (2025). "Time to Diagnose Endometriosis: Current Status, Challenges and Regional Characteristics-A Systematic Literature Review." Bjog 132(2): 118-130.

3. Amador, F. L. D., et al. (2024). "Use of podcasts for health education: a scoping review." Rev Bras Enferm 77(1): e20230096.

2.0 Rationale and Specific Aims

Prior research has shown that podcasts are a desired format for patient education (3). In obstetrics, a labor-focused podcast improved patient satisfaction for patients undergoing induction of labor (4). Educational podcasts have not yet been studied in patients with chronic pelvic pain. Additional resources and educational support for patients with chronic pelvic pain are needed. A podcast series to supplement traditional patient education in outpatient clinical visits may increase patient satisfaction and improve patient outcomes.

We aim to develop a podcast series on selected topics related to chronic pelvic pain for patients receiving care from a specialist in complex benign gynecology/minimally invasive gynecologic surgery. Secondly, we aim to assess the impact of the podcast on outcomes including pelvic pain symptoms, social support, loneliness, anticipated stigma and patient satisfaction.

3. Amador, F. L. D., et al. (2024). "Use of podcasts for health education: a scoping review." Rev Bras Enferm 77(1): e20230096.

4. Cai, F., et al. (2023). "A randomized trial assessing the impact of educational podcasts

on personal control and satisfaction during childbirth." American Journal of Obstetrics & Gynecology 228(5): 592.e591-592.e510.

3.0 Animal Studies and Previous Human Studies

A randomized trial was previously performed to study the impact of an educational podcast for patients undergoing induction of labor. A total of 7 labor-related podcast episodes were recorded on patient-suggested topics. Patients then completed surveys on birth satisfaction and perception of control during childbirth after their delivery. Perception of control during childbirth was higher among those who listened to the podcast. The educational podcast increased personal satisfaction and labor agentry.

4. Cai, F., et al. (2023). "A randomized trial assessing the impact of educational podcasts on personal control and satisfaction during childbirth." American Journal of Obstetrics & Gynecology 228(5): 592.e591-592.e510.

4.0 Inclusion/Exclusion Criteria

Inclusion:

- Age > or = 18
- Patients with primary complaint of chronic pelvic pain or endometriosis who are presenting for new patient visit/consult at Vanderbilt Health sites
- Access to mobile phone or computer
- Access to My Health at Vanderbilt App
- Primarily English-Speaking, able to understand spoken English

Exclusion:

- Patients with acute pelvic pain or other acute symptoms
- Non-English speaking participants given the podcast/educational materials will be in English

5.0 Enrollment/Randomization

Individuals will be screened for eligibility via chart review of the electronic medical record prior to their outpatient visits with providers in the division of minimally invasive gynecologic surgery at multiple Vanderbilt Health sites.

Patients will then be sent a message via My Health at Vanderbilt inviting them to complete an eligibility screening questionnaire via RedCap.

If eligible, they will be invited to participate in the study and provide informed consent via RedCap. Once the participants provide informed consent, they will be randomized to the control group (standard of care) or the podcast group (standard of care with access to educational podcast).

Randomization will be performed via a computer-based randomization tool using block randomization to ensure adequate sample sizes in both groups via RedCap.

6.0 Study Procedures

The study design is a randomized controlled trial. Patients will be screened for eligibility prior to their new patient or consult visit with a provider in the Minimally Invasive Gynecologic Surgery Division for a chief complaint of chronic pelvic pain or endometriosis. Eligible patients will receive information about the study and the opportunity to enroll with informed consent.

All patients who enroll will complete baseline surveys, which use previously validated questionnaires on the impact of pelvic pain on quality of life, social support, loneliness, anticipated stigma and patient satisfaction. They will also be asked about prior treatments for pelvic pain and demographic features. Then, those randomized to the intervention/podcast group will be sent a link biweekly to different episodes of the podcast. Podcast topics will include definition/diagnosis of chronic pelvic pain, the differential for chronic pelvic pain, medical management options of endometriosis, surgical management options of endometriosis, pelvic floor physical therapy, interventional pain options, central sensitization and mental health.

Participants will complete follow up surveys using the same previously validated questionnaires 3 months after their initial consult visit and 6 months after their initial consult visit.

Privacy and confidentiality will be maintained by removing patient identifiers from the research database, which will be kept and maintained securely via RedCap separate from the electronic medical record.

Survey responses will be converted to numerical scores for each instrument. Differences in scores across time periods (baseline vs 3 months vs 6 months) will be computed for all participants. Mean differences will be compared between the control group and the podcast intervention group using the Mann Whitney U test.

Day 1/Visit 1: Clinic Visit, invitation to participate in study, Survey #1
Week 1-12: Podcast episodes are distributed to those in the podcast group via My Health at Vanderbilt App, episode links sent biweekly
Day 90/Visit 2: Clinic Visit, Survey #2
Day 180/Visit 3: Clinic Visit, Survey #3

7.0 Risks

List all adverse effects observed in animal studies, previous human studies, or laboratory observations. List the frequency expected for the side effects and a statement that there may be unknown or unanticipated adverse effects.

No adverse effects have been observed in prior studies. Participants may have psychological/emotional risks including feeling upset related to information discussed in the podcast related to their health. Patients will be provided with information to seek guidance/support from their clinical providers with any concerns related to their health, as they would be for standard clinical care. There may be unknown or unanticipated adverse effects.

8.0 Reporting of Adverse Events or Unanticipated Problems involving Risk to Participants or Others

The Investigator will assure that adverse events and unanticipated problems to participants or others are reported to the IRB no later than 7 calendar days after the Investigator first learns of the event or problem.

9.0 Study Withdrawal/Discontinuation

Patients will be advised that participation in research is voluntary and that they can withdraw from the study at any time and do not have to disclose a reason.

10.0 Statistical Considerations

A sample size of 100 participants will ensure that we have 80% power with alpha of 0.05 to detect a mean difference of 15 points with standard deviation of 23 on the Endometriosis Health Profile-30 Social Support Subscale. This has been reported as the threshold for minimal clinical difference.

11.0 Privacy/Confidentiality Issues

Participant PHI including age, MRN and date of consult visit will be stored separately from the survey data. The survey responses are not identifiable. A code link will be used to access the participant PHI and will only be able to be accessed by the study personnel to minimize breeches of confidentiality. The data will be stored securely on RedCap.

12.0 Follow-up and Record Retention

The study will last for approximately 1.5 years. Enrollment will take approximately 6 months. Participants will be enrolled in the study for a total of 6 months. Data analysis will take approximately 6 months. All data will be deleted at the conclusion of the study.