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Emotional Well-Being During Fertility Treatment: A Randomized Controlled Trial to Evaluate the Use of an Online Learning Platform as a Resource

Jody L. Madeira

Abigail L. Bernard

Ashley K. Barbour

Steven R. Lindheim

Linnea R. Goodman

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powered, the staff STAI composite score was 38 (medium anxiety state) versus 27.5 (low anxiety state) pre and post intervention respectively. The Press-Ganey surveys have been completed and are requested.

CONCLUSIONS: Though there was no significant difference in overall STAI scores pre and post intervention, patients rated feeling upset significantly more after implementation of the healing environment. The reason for this is currently unclear. Differences in patient satisfaction scores are yet to be determined.

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EMOTIONAL WELL-BEING DURING FERTILITY TREATMENT: A RANDOMIZED CONTROLLED TRIAL TO EVALUATE THE USE OF AN ONLINE LEARNING PLATFORM AS A

RESOURCE. Abigail L. Bernard, MD,¹ Ashley K. Barbour, MPhys,² Jody L. Madeira, Ph.D., J.D.,³ Steven R. Lindheim, M.D.,⁴ Linnea R. Goodman, MD¹ ¹University of North Carolina, Raleigh, NC; ²Brody School of Medicine at East Carolina University, Greenville, NC; ³Professor of Law, Bloomington, IN; ⁴Wright State University, Dayton, OH.



OBJECTIVE: Infertility and associated therapies have been characterized as anxiety-provoking. As emotional states can be triggered by stimuli, we assessed the impact of a visual multimedia electronic (e)-learning and e-consent platform on patients' anxiety states prior, during, and upon completion of infertility treatment cycles.

DESIGN: Prospective randomized controlled trial

MATERIALS AND METHODS: Patients aged 18-43 years undergoing their first intrauterine insemination (IUI) or in-vitro fertilization (IVF) cycle were randomized to two groups receiving either: 1) standard fertility counseling with their physician and nurse team (conventional group); or 2) standard counseling plus access to an interactive multimedia e-learning platform (EngagedMD) before and during their treatment cycle (EMD group). Patients completed surveys including a modified 19-question State-Trait Anxiety Inventory (STAI) at three time points to quantitatively assess their treatment experience: T1 (prior to treatment), T2 (after the MD/RN teaching session at the start of their cycle), and T3 (after cycle completion). Each STAI item is given a weighted score of 1 to 4, the instrument has a possible score from 19 to 76, and the 50th percentile for an anxious state in women aged 19-39 is 34. Student's t-test and Chi-squared test were used as appropriate.

RESULTS: To date, a total of 77 patients (IUI=35 and IVF=42) with a mean age of 35.2 +/- 4.4 years have been enrolled with no differences in baseline demographics (age, duration of infertility, infertility diagnosis, and education level) for both IUI and IVF and conventional and EMD groups. Overall, STAI scores at T1, T2, and T3 were 37.8 +/- 11.3, 37.0 +/- 10.6, and 37.0 +/- 11.6 respectively, with no difference in IUI and IVF patients at T1 (p=0.51). However, IVF patients scored significantly higher at T2 (40.3 +/- 9.3 vs. 33.7 +/- 11.1, p=0.03) and T3 (41.3 +/- 12.1 vs. 32.7 +/- 9.5, p=0.01) compared to IUI patients at the same timepoints. IUI patients had a significant decrease in their anxiety from T1 to T2 (mean delta -3.1; p=0.05) and T1 to T3 (mean delta -3.9 p=0.01), while patients undergoing IVF treatments had no significant change in their anxiety scores throughout. With respect to conventional and EMD groups, there were no differences in STAI scores in IUI and IVF cycles from T1 to T3. Of the patients undergoing IUI, there was a significant decrease in patients' anxiety levels from T1 to T2 in the EMD group (35.8 +/- 9.3 vs. 31.6 +/- 10.2; p=0.02), while this difference was not seen in the conventional group (37.4 +/- 11.5 vs. 35.5 +/- 12.0; p=0.46).

CONCLUSIONS: Anxiety levels were significantly elevated in first-time IVF patients during and after treatments compared to those undergoing IUI. The addition of an e-learning platform did not alter the level of anxiety compared to traditional teaching methods in IVF patients. In contrast to standard counseling, patients undergoing IUI experienced a decrease in their immediate anxiety level after exposure to EngagedMD. Overall, anxiety levels in this cohort of patients were high, indicating that added psychological resources may be beneficial to this population.

References: none

SUPPORT: none