

Impact of Mindfulness-Based Stress Reduction on Anxiety and Stress among Infertile Women

Mrs. Simi Varghese, Research Scholar, Shri Venkateshwara University, Amroha

Prof. Dr. Kavithamole PJ , Research Supervisor, Shri Venkateshwara University, Amroha

Introduction

Infertility is defined as the failure to achieve a clinical pregnancy despite regular, unprotected sexual activity lasting at least 12 months. According to the Indian National Family Health Survey, urban women had substantially higher infertility rates than rural women, and the greater the level of education of the woman suffering infertility, the higher the likelihood of infertility. However, the buck usually stops with males when it comes to infertility. The social effects of infertility disproportionately impact women. Infertile women's stress levels and coping skills should be evaluated and improved upon. Therefore, we assessed the psychological impact of infertility and the ways in which women in Gonda, Uttar Pradesh, who sought help at the infertility outpatient clinic (OPD) dealt with it. "Mindfulness-based cognitive therapy," developed by Segal et al (MBCT), "Mindfulness is," as defined by Kabat-Zinn, "paying attention in a certain way: on purpose, in the present moment, and without judgement." In order to help its patients, mindfulness-based cognitive therapy (MBCT) instructs them in the dual skillsets of "mindfulness" and "cognition." Methods for identifying unhelpful thought patterns and developing effective countermeasures are taught to MBCT participants. The main goal of the cognitive therapy used in MBCT is to help people change the way they normally react to stressful events. Mindfulness-based cognitive therapy (MBCT) emphasises the importance of learning to accept one's thoughts and feelings without judgement. Integral to the process of cultivating mindfulness is instructing individuals in various techniques for dealing with stress. Meditation is a part of MBCT because of its positive effects on concentration and mindfulness. Indications are made that MBCT may assist women in dealing with emotional difficulties, including depression and anxiety. **METHODOLOGY** This study was conducted in a selection of Gonda hospitals using an assessment technique and a quasi-experimental pre- and post-test control group design. The conceptual framework evolved from an adjustment of Roy's original idea (1991). A total of 200 infertile women took part in the study. The sample pool was divided in half, with each half receiving 100 samples. The samples were selected using a random sampling approach, and the therapeutic

effectiveness of meditation in reducing stress and anxiety was determined using the perceived stress scale and the modified Hamilton anxiety scale. Descriptive statistics were used to examine the demographic data (frequency and percentage). Exam-related tension and anxiety were compared to that felt in the days preceding the test using descriptive statistics (mean, standard deviation, frequency, and percentage). The paired t-test was used to compare the experimental group's stress and anxiety levels before and after the tests. The effectiveness of meditation therapy was compared to a control group using a t-test to see whether or not there was a significant difference in results. The Chi-square test was used to examine the relationship between demographic factors and post-test levels of stress and anxiety in the experimental group.

Conclusions and Findings More than half of both the control group and the treatment group's infertile women were under the age of 30. The control group consisted of fewer women over the age of 45. Our conclusion is corroborated by the findings of Mary S. (2018), who also observed that the majority of the women were in their twenties and thirties. Suffice it to say that 70% of it is true. There were more college graduates among infertile women in the control group (40%) than among those in the experimental group (mostly infertile women with some high school completion) (30 percent). For both groups, women were less likely to have finished primary school (4.1% of the control group and 6.6% of the experimental group) than men (5.8%). These findings are consistent with those of Thomas M. (2018), who showed that 54% of women had finished high school. Women experiencing infertility were more likely to be stay-at-home mothers (70% in the control group vs. 60% in the experimental group). In the control group, women made up just 4.1% of government employees, while in the experimental group, they made up 100% of government workers. This conclusion agrees with the results of Kaveri et al. (2014), who also found that the majority of the women were housewives (71 percent). Women who were not infertile were more likely to be members of a nuclear family (67%), as opposed to mixed families (41%). Sixty percent of those who took part in the study were from nuclear or blended families. Jame (2012) observed a similar pattern, reporting that 41% of infertile women were part of nuclear families while 59% were part of blended families (47 percent). Almost 90% of all infertile women were Hindu, and that was true in both the control and treatment groups. Comparatively fewer Muslim and Christian women were found in the control group (3.1% and 6.3%, respectively) than in the experimental group (6.7% and 5.2%, respectively). These findings are consistent with those revealed by Hema Rani (2013), who also discovered that the majority of the women were Hindu (78 percent). Most infertile women (40%) in the control group and almost half (49%) in the treatment group lived in households with monthly earnings of

less than Rs. 5,000 or Rs. 10,001,500, respectively. Women's monthly wages averaged less than Rs. 1500 in both the control and treatment groups, with less than 15% of women in each group making that much. Similar findings were reported by Swathi (2017), who showed that over two-thirds of women earned more than Rs. 5,000 a month. Most women who are trying to conceive have been trying for four to nine years (48% in the control group and 50% in the experimental group). Women in the treatment group (9.2%) were more likely to have suffered infertility for less than 2 years, whereas those in the control group (7.9%) were less likely to have done so. It's consistent with the data presented by Ramesh J. M. (2017), who found that the women had been infertile for an average of 40.3 years. Almost three-quarters (72%) and almost ninety-one percent (91.8%) of women who experience infertility are not predisposed to it by genetics. Women in the treatment group (40%) were less likely to have a family history of infertility than those in the control group (20.1%). Women in the control group received infertility therapy for about 49.2 percent less time than those in the experimental group (18.21 percent). Both the control and intervention groups' female participants were less likely to seek infertility therapy after 10 years (4.5 percent and 7.6 percent, respectively). Analysis of survey responses from the control group revealed that 65.6% of women felt moderate stress during the pretest, whereas 34.2% reported severe stress. Fifty-five percent of the women and almost half of the males indicated significant levels of stress in the pretest. Levels of anxiety in the experimental group Sam ER (2017) also showed that 53% of women feel stress, with 29% experiencing a low degree of stress and 14% experiencing a high level of stress; therefore, these findings are consistent with hers. Among the women in the control group, 62% reported mild anxiety, 31% reported moderate anxiety, and 11% reported severe anxiety. The majority of women in the control group had mild to moderate anxiety, whereas 6.7% reported no anxiety and 13% reported severe anxiety. In line with this, infertile women had a 39 percentage point higher chance of feeling moderate anxiety and an 18 percentage point higher chance of suffering severe anxiety (Fara S et al., 2015). Post-test findings showed that 72.8% of infertile women reported a moderate amount of stress, whereas 76.2% of those in the experimental group reported a low amount of stress. Neither the control group nor the experimental group included anyone with just a moderate amount of stress. The great majority of infertile women (69%) in the control group and (87%) in the experimental group reported minor anxiety after the intervention. A total of 6.78 percentage points fewer women in the control group had severe anxiety than those in the treatment group (where there was none). The mean score (18 + 5.59) of the experimental group was statistically lower than the mean score (28 + 5.96) of the control group

($t = -8.91$). ($p 0.05$). Therefore, we reject H_0 and accept H_1 , which states that the experimental group's post-test stress ratings will be much lower than their pre-test levels. The control group's post-test mean score ($28.1 + 5.76$) was not significantly different from their pre-test mean score ($24.1 + 2.11$), as shown by the t value of 1.18. Raq (2019) reports that test-takers in the experimental group reported considerably lower levels of stress after the exam compared to levels reported before the test ($M = 231.34$, $SD = 18.9$). There was a statistically significant gap here ($p.001$). The mean stress levels in the control group were not significantly different between the two assessments ($M = 228.51$, $SD = 19.93$). Statistical analysis showed that the post-test mean score for the experimental group was $14 + 5.22$, which was considerably lower than the pre-test mean score of $38 + 8.01$ ($t = 11.07$). It was thus assumed that the experimental group's post-test anxiety ratings would be much lower than their pre-test values, accepting Hypothesis 2 of the research. The control group's mean score increased from the pretest to the posttest ($34.8 + 9.7$), but this increase was not statistically significant ($t = 1.44$) at the 0.05 level.

There was no statistically significant relationship between post-test anxiety in the experimental group and any of the following characteristics: age, education, employment, family type, religion, family monthly income, infertility length, infertility family history, or infertility treatment duration. The fifth hypothesis (H_5) was thus rejected since it predicted no significant association between infertile women's post-test stress levels and their demographic characteristics. conforming to, After completing the experiment, Tamilselvi (2019) found that all of the women in the experimental group, regardless of their background, reported significantly reduced levels of stress in the post-test. The findings of the posttest given to the experimental group demonstrate this. No correlation was detected between post-test anxiety and age, education, employment, family type, religion, family monthly income, infertility duration, infertility family history, or infertility treatment length in the experimental group. Research hypothesis H_6 was disproved since no significant association was found between post-test anxiety and demographic factors in the experimental group. CONCLUSION Those infertile women who were treated with mindfulness reported much lower levels of stress and anxiety. Pre-test results showed that most women were experiencing moderate levels of stress. During the post-test, 70% of the infertile women in the control group reported high levels of stress, whereas 66% of those in the experimental group reported low levels of stress. Ninety-seven percent of the women who did the pretest reported experiencing anxiety. In the infertile women's post-test, 70% of the control group and 86.6 percent of the treatment group experienced moderate anxiety. The statistical

findings suggest that women experiencing infertility who are exposed to the meditation therapy group report much lower levels of stress and anxiety than those in the control group. Thus, meditation therapies may aid in reducing stress and enhancing fertility..

REFERENCE

1. Domar AD., Zuttermeister PC., Friedman R. The psychological impact of infertility: a comparison with patients with other medical condition. *J Psychosom Obstet Gynaecol.* 1993;14(suppl):45–52. [PubMed] [Google Scholar]
2. Fast Facts About Infertility. Available at: <http://www.resolve.org/about/fast-facts-about-fertility.html>. Resolve: The National Fertility Association. Accessed July 26, 2017; [Google Scholar]
3. Chen TH., Chang SP., Tsai CF., Juang KD. Prevalence of depressive and anxiety disorders in an assisted reproductive technique clinic. *Hum Reprod.* 2004;19(10):2313–2318. [PubMed] [Google Scholar]
4. Volgsten H., Skoog Svanberg A., Ekselius L., Lundkvist O., Sundström Poromaa I. Prevalence of psychiatric disorders in infertile women and men undergoing in vitro fertilization treatment. *Hum Reprod.* 2008;23(9):2056–2063. [PMC free article] [PubMed] [Google Scholar]
5. Sejbaek CS., Hageman I., Pinborg A., Hougaard CO., Schmidt L. Incidence of depression and influence of depression on the number of treatment cycles and births in a national cohort of 42 880 women treated with ART. *Hum reprod.* 2013;28(4):1100–1109. [PubMed] [Google Scholar]
6. Holley SR., Pasch LA., Bleil ME., Gregorich S., Katz PK., Adler NE. Prevalence and predictors of major depressive disorder for fertility treatment patients and their partners. *Fertil Steril.* 2015;103(5):1332–1339. [PMC free article] [PubMed] [Google Scholar]
7. Pasch LA., Holley SR., Bleil ME., Shehab D., Katz PP., Adler NE. Addressing the needs of fertility treatment patients and their partners: are they informed of and do they receive mental health services? *Fertil Steril.* 2016;106(1):209–215. [PubMed] [Google Scholar]
8. Lakatos E., Szigeti JF., Ujma PP., Sexty R., Balog P. Anxiety and depression among infertile women: a cross-sectional survey from Hungary. *BMC Womens Health.* 2017;17(1):48. [PMC free article] [PubMed] [Google Scholar]

9. Shani C., Yelena S., Reut BK., Adrian S., Sami H. Suicidal risk among infertile women undergoing in-vitro fertilization: Incidence and risk factors. *Psychiatry Res.* 2016;240:53–59. [PubMed] [Google Scholar]
10. De Berardis D., Mazza M., Marini S., et al. Psychopathology, emotional aspects and psychological counselling in infertility: a review. *Clin Ter.* 2014;165(3):163–169. [PubMed] [Google Scholar]
11. Maroufizadeh S., Karimi E., Vesali S., Omani Samani R. Anxiety and depression after failure of assisted reproductive treatment among patients experiencing infertility. *Int J Gynaecol Obstet.* 2015;130:253–256. [PubMed] [Google Scholar]
12. Crawford NM., Hoff HS., Mersereau JE. Infertile women who screen positive for depression are less likely to initiate fertility treatments. *Hum Reprod.* 2017;32(3):582–587. [PMC free article] [PubMed] [Google Scholar]
13. Gameiro S., Boivin J., Peronace L., Verhaak CM. Why do patients discontinue fertility treatment? A systematic review of reasons and predictors of discontinuation in fertility treatment. *Hum Reprod Update.* 2012;18(6):652–669. [PMC free article] [PubMed] [Google Scholar]
14. Gameiro S., Boivin J., Domar A. Optimal in vitro fertilization in 2020 should reduce treatment burden and enhance care delivery for patients and staff. *Fertil Steril.* 2013;100(2):302–309. [PubMed] [Google Scholar]