



## EFFECTIVENESS OF MUSIC THERAPY ON THE LEVEL OF STRESS AMONG THE WOMEN WITH INFERTILITY, ATTENDING INFERTILITY CLINIC AT CUDDALORE DISTRICT

### Nursing

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### ABSTRACT

A Pre-experimental study was conducted to identify the stressors and assess the effectiveness of music therapy on the level of stress among the women with infertility, attending infertility clinic among 40 infertile women selected by convenience sampling technique in an infertility clinic at Cuddalore district. Stress rating scale and interview method were used to identify the stressors and structured-questionnaire was used to collect data regarding pre and post interventional level of stress. The result revealed that the stress of infertile women was significantly reduced with music therapy at ( $p < 0.001$ ).

### KEYWORDS

Music therapy, Infertile women, Stress.

### INTRODUCTION

“Music washes away from the soul the dust of everyday life.”  
– Berthold Auerbach  
“Good music always defeats bad luck.”  
– Jack Vance

Pregnancy is the most beautiful experience to a woman signaling the triumph of life. Conceiving a baby is one of the most beautiful events in women's life because nothing could be compared to the feeling of nurturing a baby, watching its growth and creating a life. In every culture, child bearing and rearing is considered as a major event in the family. However, for millions of women, this dream is an elusive one; for those who cannot achieve pregnancy feel heart break which leaves them feel isolated, depressed, angry, grief and hostile.

Infertility is a reproductive health problem that affects many and becoming more common. Especially in India, it is a complex physiological, spiritual and psychological crisis and seasoned with stigma, which all the infertile women lead with greater emotional setback.

Inability to conceive children is experienced as a stressful situation by an individual and couple as well. The relationship between stress and infertility is considered equal to chick or egg. It can be seen as causative (where the stress causes infertility) (or) reactive (where infertility causes stress) factor.

Stress has become a major and common part of every individual's life paired up with lack of exercise. If a woman is really under stress, she cannot take care of herself which would further challenge the chance of pregnancy. Stress can affect hormone levels, anxiety may begin to haunt and negative thoughts loop endlessly through the mind.

When we are under stress, our body is engaged in the “fight” or “flight” response, which nature designed to allow survival. In response to stress, the hypothalamus produces a hormone called corticotropin releasing factor (CRF) which activates the hypothalamic-pituitary-adrenal (HPA) system, causing it to release neurotransmitters (chemical messengers) called catecholamines, as well as cortisol, the primary stress hormone. However, we also possess the opposite of “fight” or “flight” response—the relaxation response. These responses can be developed through a number of techniques such as meditation, yoga, music therapy, breath focus, body scan, progressive muscle relaxation therapy, guided imagery, positive therapy, acupuncture, autogenic training and relaxation therapy.

### MATERIAL AND METHODS

Quantitative research approach is followed using pre-experimental research design. Using convenience sampling technique 40 infertile women were selected. Ethical clearance was obtained from the Human

Ethical Committee of the institution. Formal permission was sought from the Medical Superintendent and Head of the Department of Obstetrics and Gynecology unit.

Inclusion criteria comprised only infertile women who can speak and understand Tamil or English, in selected hospitals. Exclusion criteria included infertile women who are unwilling to participate. After explanation and obtaining written consent from all the infertile women, data was collected from the infertile women individually by interview and identified the level of stress using modified infertility stress rating scale and self-administered structured questionnaire was administered to collect data on socio- demographic variables and assess the effectiveness of music therapy among the women with infertility.

**Table 1: Distribution of Level of Stress Among Women with Infertility Before and After Administering Music Therapy.**

N=40

Level of stress	Pre test		Post test	
	No	%	No	%
Mild stress	-	-	-	-
Moderate stress	7	17.5%	40	100%
Severe stress	28	70%	-	-
Very severe stress	5	12.5%	-	-

Table 1 shows that majority of the infertile women (70%) had severe stress, 17.5% of the infertile women had moderate stress and remaining 12.5% of the infertile women had very severe stress level before administering music therapy. Almost all of the infertile women were having moderate stress level after administering music therapy. It shows that there was an improvement in the level of stress among the women with infertile.

**Table 2: Comparison of pre and posttest mean stress level among women with infertility.**

N=40

Test	Mean	Standard deviation	Paired t' test	'P' value
Pre test	104.450	13.525	11.802	0.000
Post test	75.150	5.855		

Table 2 depicts that the mean score of pretest stress level of women with infertility was (104.450), and mean posttest stress level (75.150) and there was significant reduction in the stress among women with infertility after administering music therapy.

The improvement was statistically tested by paired 't' test and the result were found to be significant ( $p < 0.001$ )

**Table 3: Comparison of stress level among women with infertility according to listening frequency.**

(N=40)

Listened Music	n	Mean Stress Score	SD	MD	t-value	P Value
One time/day	19	79.42	4.76	10.90	8.471	0.001 (S)
Two times/day	21	68.52	3.11			

S – Significant

The above table inferred the t-value of stress level among women with infertility according listening frequency. The calculated t-value (8.471) is significant at 0.01 level. Therefore, one time/day group of respondents have high mean score than the two times/day groups.

## DISCUSSION

The present study intended to reduce the level of stress among infertility women with music therapy. The findings revealed that there is an improvement in posttest stress level which was tested by paired 't' test and found to be significant at the level of ( $p < 0.001$ )

## CONCLUSION

The present study identified the stressors and assessed the effectiveness of music therapy on the level of stress among women with infertility. With the aid of music therapy, women who were extremely and severely stressed moved to moderate state were and there was no association between the level of stress and selected variables except for duration of treatment (P value=0.027).

## Implications for nursing practice

The findings of the study enlighten the fact that music therapy can be used to reduce the level of stress among women with infertility. Music therapy is a non-pharmacological intervention. Nursing personnel are in the best position to implement the music therapy to different clients who are experiencing stress. Music therapy is one of the complementary therapies played in hospitals as well as home and thus expanding the nurse's role in patient care. The nurses have an excellent opportunity to give counselling for infertile couples

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