

ABSTRACT

Pregnancy involves drastic changes in both physiological and psychological states, which significantly affect pregnancy outcomes, but only a few studies have discovered the relationship between multiple psychological factors with music and meditation intervention. The study's primary objective focuses on assessing the effectiveness of music and meditation intervention on psychological status of pregnant women. The study also aims to examine the socio-demographic profile of the pregnant women, construct and validate a pregnancy psychological status scale, assess their psychological status and its dimensions based on the socio-demographic variables, create music and meditation intervention modules for pregnant women, and compare their effectiveness. In this quasi-experimental study, 300 pregnant women in their first trimester were purposively selected from government and private health centres in Assam's Lakhimpur District. Following stringent inclusion and exclusion criteria, 120 pregnant women were chosen for the final intervention. Starting in the second trimester and continuing until the eighth month (third trimester), targeted music and meditation interventions were introduced to the selected pregnant women, commencing in the fourth month of pregnancy. The pregnant women were subjected to music (n=60) and meditation(n=60) intervention, further randomization was done in the control (30 respondents) and experimental (30 respondents) groups for each intervention module. The music and meditation experimental groups underwent 20 and 14 sessions respectively. Pre, mid and post-intervention data were collected and assessed using a self-constructed Pregnancy Psychological Status Scale with 40 items. Statistical analyses were employed, including independent t-tests, ANOVA, repeated measures ANOVA and paired t-tests.

In the present study, a pregnant woman's psychological status is a representation of her level of happiness, stress and anxiety, family relationships, socialization, physical health, and body image. Pregnant women's psychological status was divided into three categories: high, moderate, and low. High psychological status (scored between 121 and 160) means that the woman is happy, able to cope with stress and anxiety, has strong family relationships, is better able to socialize, has good physical health and a positive body image. Moderate psychological status, with a score ranging from 81 to 120. It indicates pregnant women have average levels of happiness, average levels of stress and anxiety management, average family relationships, moderate levels of socialization, average physical health, and body image. Low psychological status (with a score ranging from 40 to 80). It indicates that pregnant women are less happy, have trouble coping with stress and anxiety, have poor

socialization, poor family relationships, poor physical health, and have a negative body image.

Findings revealed that the majority of respondents (45.00%) exhibited moderate psychological status, followed by low (30.00%) and high (25.00%) psychological status, with the younger age group (18-24 years) experiencing poorer psychological status than the older group (25-40 years), supported by a t-value of 4.078 ($p < 0.01$). Education levels also played a significant role, with illiterate participants and postgraduates exhibiting significant differences in psychological status (t-value 4.677, $p < 0.01$). Higher monthly income (55,001-80,000) was associated with a higher mean psychological status score (t-3.41, $p < 0.05$). Planned pregnancies showed a higher mean psychological status score than unplanned pregnancies, supported by a t-value of 4.165 ($p < 0.01$).

Additionally, the multivariate analysis of variance in the music intervention mean profile plot showed that significantly improved psychological well-being in pregnant women, particularly better in coping stress, family relationships, socialization, physical health, and body image. On the other hand, the mean profile plot of meditation demonstrated that it has significant impact on managing stress, family relationships, physical health, body image, and overall psychological status in pregnant women. Despite these improvements, the control group's mean value remains unchanged.

Based on the findings of comparison between the music and meditation experimental group, the multivariate analysis of variance revealed a significant difference in overall psychological status between trimesters ($F = 20.64$, $p < 0.01$, $\eta^2 = 0.420$), indicating a large effect size. The mean profile plot of the study revealed that music and meditation interventions improve psychological status in the areas of happiness, coping stress & anxiety, good physical health. Meanwhile meditation has a more significant effect on body image and family connection dimensions in all trimesters.

The study advocates heightened attention from healthcare professionals, society, and family members to recognize and address psychological well-being during pregnancy. It recommends integrating meditation practices within Assam's healthcare centres, presenting a transformative opportunity to enhance pregnant women's mental health and overall lifestyle.

Keywords: Pregnant women, psychological status, music, meditation intervention, trimesters