Effectiveness of Intervention Package on Stress among Post Covid Antenatal Women

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Abstract: *The present study was conducted to assess the effectiveness of intervention package on stress among post covid antenatal women in Govt. Medical College Hospital, Kottayam. A quantitative approach was used for the study. The study was theoretically supported by Betty Neuman's system model. A total of 35 subjects were selected for the study using non probability purposive sampling technique. The data were collected using socio personal data sheet, clinical data sheet and rating scale to assess the level of stress. On the first day of assessment pre test was conducted followed by implementation of intervention package as threeparts. There was an initial interaction session which is a rapport building session on day-1 for about 10 minutes between researcher and research participant to ventilate the feelings. In the second part, researcher demonstrates body awareness meditation which include technique of paying attention to different parts of body in sequence from toes to head with the help of pre recorded audio for duration of 15 minutes starting from the day-1, which is to continue at home once in a day for 21 days and followed by telephonic reminder. There was a 15 minutes group conference video call on every 5th day for sharing their experiences and clarification of doubts regarding care among 5-8 members of post covid antenatal women arranged by the investigator. Post test was conducted on day-21 using the same tools. Data were analyzed using descriptive and inferential statistics. The results of the study revealed that the intervention package had significant effect on reducing stress (p< 0.01) among post covid antenatal women.*

Keywords: Stress; intervention package; post covid antenatal women

1. Introduction

The SARS-CoV-2 virus, which originated in Wuhan, China in December 2019, was designated as a pandemic by the World Health Organization (WHO) on 11 March 2020 [1].

Since the end of 2019, the Coronavirus (COVID-19) pandemic outbreak has changed the way of living all over the world. These changes have triggered numerous pandemic-related psychological responses, which often received less scientific attention than general medical complications[2].

The SARS-CoV-2 pandemic condition creates an additional risk factor likely to increase the stress on pregnant women who are already prone to depression and anxiety. Depression and anxiety during pregnancy may increase the risk for miscarriage, preterm birth, lower birth weight, lower Apgar score, and fetal death[3].

2. Objectives

1) To assess the stress among post covid antenatal women.
2) To evaluate the effectiveness of intervention package on stress among post covid antenatal women.

3. Materials and methods

The quantitative approach was adopted for the study. The research design selected was pre experimental-one group pre testpost test design. Non probability purposive sampling was used in the study. A total of 35 subjects were selected for the study who were postcovid antenatal women, within 12 weeks of postcovid period were selected from antenatal clinic of Government Medical College Hospital, Kottayam.

Inclusion criteria of the present study was who were covid positive in the present pregnancy, who were within 12 weeks of postcovid period and able to comprehend and communicate Malayalam or English. Those who excluded from the study were post covid antenatal women with psychiatric illness, with hearing and visual impairment and who were not having mobile phone with whatsapp application. Tools and techniques used to collect data in the present study were socio personal data sheet, clinical data sheet and rating scale to assess the level of stress.

On the first day of assessment pre test was conducted followed by implementation of intervention package as three parts. There was an initial interaction session which is a rapport building session on day-1 for about 10 minutes between researcher and research participant to ventilate the feelings. In the second part, researcher demonstrates body awareness meditation which include technique of paying attention to different parts of body in sequence from toes to head with the help of pre recorded audio for duration of 15 minutes starting from the day-1, which is to continue at home once in a day for 21 days and followed by telephonic reminder. There was a 15 minutes group conference video call on every 5th day was made among 5-8 members of postcovid antenatal women arranged by the investigator. Post test was conducted on day-21 using the same tools. Data were analyzed using descriptive and inferential statistics.

4. Results

4.1 Socio personal data of post covid antenatal women

Among 35 patients, 57.1% of post covid antenatal women belonged to 24-29 years of age and 40% were educated upto

degree and above. The data showed that 74.3% of post covid antenatal women were home makers and 71.4% belonged to BPL category. Data revealed that 68.6% of post covid antenatal women belonged to nuclear family.

4.2 Clinical data of post covid antenatal women

The data indicated that 74.3% of post covid antenatal women belonged to 32-38 weeks of gestation and 62.8% were primigravida. Majority (82.9%) had no comorbidities during this pregnancy. It also showed that 11.4% had hypertension and 5.7% had Diabetes mellitus. In the study group, most of the (51.4%) post covid antenatal women belonged to 9-12 weeks duration after covid negative status and 85.7% were on home quarantine. Present study findings revealed that the majority (57.1%) were affected with covid-19 in their second trimester of pregnancy. Also 68.6% were taken two doses of covid vaccine.

4.3 Stress among post covid antenatal women

Table 1: Frequency distribution and percentage of stress among post covid antenatal women, (n=35)

Stress	f	%
Mild (0-18)	17	48.6
Moderate (19-35)	18	51.4
Severe (36-54)	0	0

The data presented in table 1 revealed that majority (51.4%) of post covid antenatal women had moderate stress.

4.4 Effectiveness of intervention package on stress among post covid antenatal women

H_{01}: There is no significant difference between pre test and post test stress scores among post covid antenatal women after the intervention package

Table 2: Median and IQR of pre test and post test scores of stress among post covid antenatal women, (n=35)

	Stress	
Group	Median	IQR
Pre test	19	16
Post test	9	9

Table 2 showed that the median scores of post covid antenatal women for pre test and post test were 19 and 9 respectively. The IQR of pre test and post test scores were 16 and 9 respectively.

Table 3: Mean rank, sum of rank, Z value and p value of pre test and post test stress scores of post covid antenatal women (n=35)

Group	Mean rank	Sum of ranks	Z	p
Pre Test	17.50	560	4.9	0.00
Post test				

Table 3 revealed that the obtained Z value was 4.9 whichwas significant at 0.01 level. It indicated that there was significant difference between pre test and post test scores of stress among post covid antenatal women. Hence the null hypothesis is rejected and it is inferred that intervention package was effective in reducing the stress among post covid antenatal women.

5. Conclusion

Intervention package was effective in reducing the stress level among post covid antenatal women, which can assist the hospitalized women to deeper reflection and stress management. Body awareness meditation plays a major role in the alleviation of stress and also restores psychological and physiological well-being. Studies have found that meditation can reduce stress so it can be used in all clinical settings.

References

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