



“Effect Of Customized Awareness Programme On Knowledge Regarding Prevention Of Pre-Eclampsia Among Women In Selected Rural Areas Of Bhopal”

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Abstract

The present study has been undertaken to assess knowledge score regarding prevention of pre-eclampsia among women by customized awareness program in Gandhi Nagar at Bhopal. The research design adopted for the study was pre-experimental in nature. The tool for the study was self-structured knowledge questionnaire which consists of two parts- PART- I consisted questions related to Socio-demographic data; PART-II consisted of self -structured knowledge questionnaire to assess the knowledge score regarding prevention of pre-eclampsia among women. The data was analyzed by using descriptive and inferential statistical methods. The most significant finding was that 62.0% of women were having average knowledge regarding prevention of pre-eclampsia whereas 38.0% had good knowledge after post-test. It was suggested that the nurses must educate women regarding prevention of pre-eclampsia.

Keyword- Effect, customized awareness program, knowledge and prevention of pre-eclampsia.

1.INTRODUCTION

Preeclampsia is a hypertensive disorder in pregnancy related to 2% to 8% of pregnancy-related complications worldwide. It results in 9% to 26% of maternal deaths in low-income countries and 16% in high-income countries. Preeclampsia is defined as new-onset hypertension. The parameters for initial identification of preeclampsia are specifically defined as a systolic blood pressure of 140 mm Hg or more or diastolic blood pressure of 90 mm Hg or more on two occasions at least 4 hours apart; or shorter interval timing of systolic blood pressure of 160 mm Hg or more or diastolic blood pressure of 110 mm Hg or more, all of which must be identified after 20 weeks of gestation. The initial presentation of preeclampsia typically arises in near-term pregnancies. Other significant findings that may or may not be a part of the clinical presentation include proteinuria, signs of end-organ damage, such as thrombocytopenia, impaired liver function, severe persistent right upper quadrant or epigastric pain, excluding all other alternative diagnoses, new-onset headache unresponsive to all forms of management, pulmonary edema, or renal insufficiency with abnormal lab values. Further distinguishing subcategories of preeclampsia include classification into mild or severe, which are deemed so based upon presentation and clinical criteria, to be described further.

2.NEED FOR STUDY

Preeclampsia and eclampsia account for greater than 50,000 maternal deaths yearly worldwide. Like hypertensive disorders, the incidence of preeclampsia is correlated to ethnicity and race, most prevalent among African-American and Hispanic patients, making up around 26% of maternal death among this population. There are several risk factors and predeterminants of preeclampsia. These include nulliparity, multi-gestation pregnancy, advanced maternal age greater than 35 years old, in-vitro fertilization or other forms of assisted reproductive technology, maternal comorbidities (chronic hypertension, chronic kidney disease, diabetes mellitus, thrombophilia, obstructive sleep apnea, obesity with pre-pregnancy BMI greater than 30), family history, history of placental abruption or preeclampsia in a previous pregnancy, or intrauterine fetal growth restriction. Of the study population with HDP, the prevalence of gestational hypertension was 79.3%, preeclampsia was 19.3% and eclampsia was 1.3%. The prevalence of gestational hypertension and preeclampsia was higher in our study compared to a similar study done in 2020 in Odisha by Pradhan et al., which was 60% and 12.8%.

3.OBJECTIVE OF THE STUDY

1. To assess the pre-test and post-test Knowledge score regarding prevention of pre-eclampsia among women.
2. To assess the effectiveness of customized awareness programme on knowledge regarding prevention of pre-eclampsia among women.
3. To find out the association between the pre-test knowledge score regarding prevention of pre-eclampsia among women with their selected demographic variables.

4.HYPOTHESES:

- RH₀:** There will be no significant difference between pretest and post-test knowledge score on prevention of pre-eclampsia among women.
- RH₁:** There will be significant difference between pretest and post-test knowledge score on prevention of pre-eclampsia among women.
- RH₂:** There will be significant association between the pre-test score on prevention of pre-eclampsia among women with their selected demographic variables.

5.ASSUMPTION

1. Women may have deficit knowledge regarding prevention of pre-eclampsia.
2. Customized awareness program will improve knowledge of women regarding prevention of pre-eclampsia.

6.METHODOLOGY:

An evaluative approach was used and research design pre-experimental one group pre-test post-test research design was used for the study. The samples consisted of 50 women selected by Non probability convenient sampling technique. The setting for the study was Gandhi Nagar at Bhopal. Data was collected with the help of demographic variables and administering a self-structured knowledge questionnaire by the investigator before and after customized awareness program. Post-test was conducted after 7 days of pretest. Data were analysis using descriptive & inferential statistics.

7.ANALYSIS AND INTERPRETATION

SECTION-I Table -1 Frequency and percentage distribution of samples according to their demographic variables.n = 30

| S. No | Demographic Variables | Frequency | Percentage |
|----------|------------------------------|-----------|------------|
| 1 | Age in Years | | |
| a. | 22-27 | 13 | 26.0 |
| b. | 28-33 | 22 | 44.0 |
| c. | 34-39 | 12 | 24.0 |
| d. | ≥40 | 3 | 6.0 |
| 2 | Family Monthly income | | |
| a. | <10000/- | 4 | 8.0 |
| b. | 10001-15000/- | 23 | 46.0 |
| c. | 15001-20000/- | 20 | 40.0 |
| d. | >20000/- | 3 | 6.0 |
| 3 | Marital status | | |
| a. | Married | 36 | 72.0 |
| b. | Single | 11 | 22.0 |
| c. | Widow | 2 | 4.0 |
| d. | Divorce | 1 | 2.0 |
| 4 | Occupation | | |
| a. | Housewife | 20 | 40.0 |
| b. | Laborer | 18 | 36.0 |
| c. | Teacher | 7 | 14.0 |
| d. | Office worker | 5 | 10.0 |

SECTION-II- Table- 2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects:

| Category and test Score | Frequency (N=50) | Frequency Percentage (%) |
|-------------------------|------------------|--------------------------|
| POOR (01-07) | 41 | 82.0 |
| AVERAGE (8-14) | 9 | 18.0 |
| GOOD (15-20) | 0 | 0.0 |
| TOTAL | 50 | 100.0 |

The present table 2.1.1 concerned with the existing knowledge regarding prevention of pre-eclampsia among women was shown by pre-test score and it is observed that most of the women 41 (82.0%) were poor (01-07) knowledge and some women have 9(18.0%) average categories.

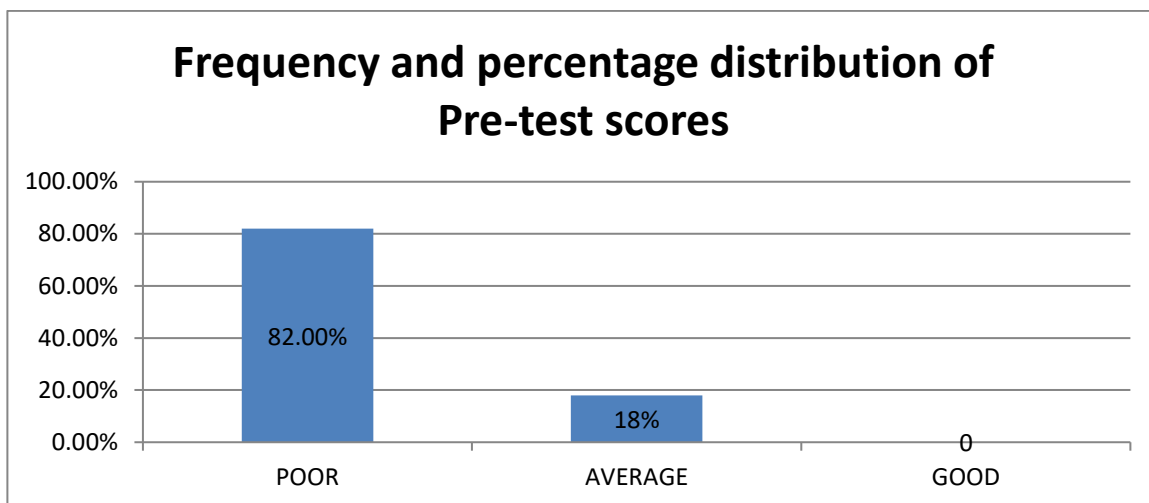


FIG.-2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects

Table-2.1.2. - Mean (\bar{X}) and standard Deviation (s) of knowledge scores:

| Knowledge Pre -test | Mean (\bar{X}) | Std Dev (S) |
|---------------------|--------------------|-------------|
| Pre-test score | 5.62 | 2.12 |

The information regarding mean, percentage of mean and standard deviation of test scores in shown in table 2.1.2 knowledge in mean pre-test score was 5.62 ± 2.12 while in knowledge regarding prevention of pre-eclampsia among women in Gandhi Nagar at Bhopal.

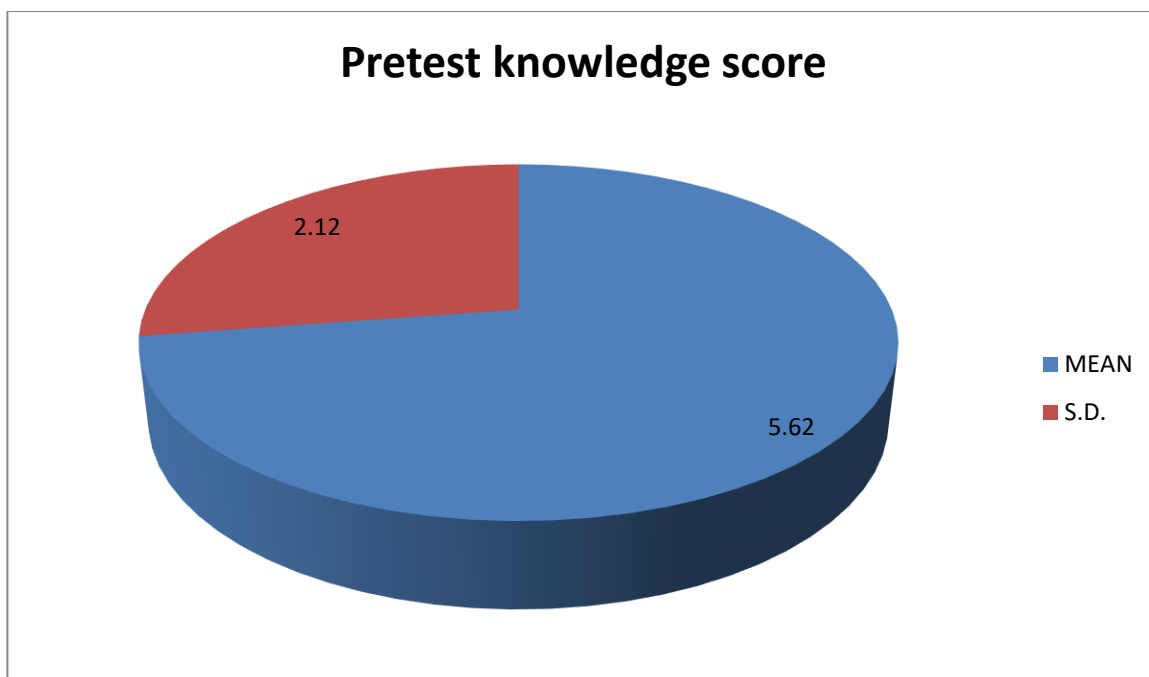


FIG.-2.1.1.1. - Mean (\bar{X}) and standard Deviation (s) of knowledge scores

Table-2.2.1- Frequency and percentage distribution of Post test scores of studied subjects:

| Category and post-test Score | Frequency (N=50) | Frequency Percentage (%) |
|------------------------------|------------------|--------------------------|
| POOR (01-07) | 0 | 0.0 |
| AVERAGE (8-14) | 31 | 62.0 |
| GOOD (15-20) | 19 | 38.0 |
| TOTAL | 50 | 100% |

The present table 2.2.1 concerned with the existing knowledge regarding prevention of pre-eclampsia among women was shown by post test score and it is observed that most of the women 19 (38.0%) were **GOOD** (15-20) knowledge

and other women have 31 (62.0%) category which are **AVERAGE** (08-14) posttest knowledge score in the present study.

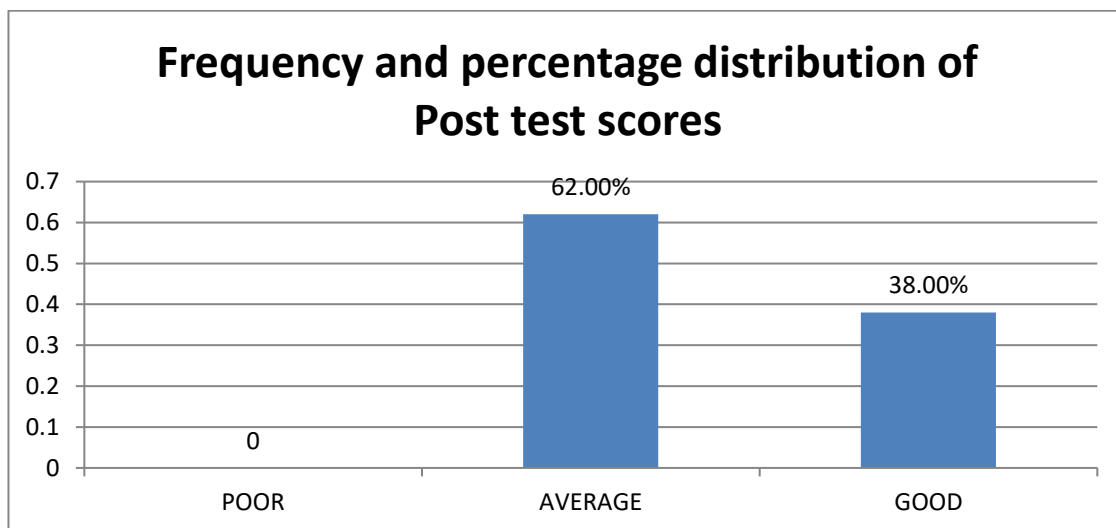


FIG.-2.2.1- Frequency and percentage distribution of Post test scores of studied subjects

Table-2.2.2. - Mean (\bar{X}) and standard Deviation (s) of knowledge scores:

| Knowledge Test | Mean (\bar{X}) | Std Dev (S) |
|-----------------|--------------------|-------------|
| Post-test score | 12.16 | 2.74 |

The information regarding mean, percentage of mean and standard deviation of post test scores is shown in table 2.2.2. Knowledge in mean post test score was 12.16 ± 2.74 while in knowledge regarding prevention of pre-eclampsia among women in Gandhi Nagar At Bhopal.

Hence, it is confirmed from the tables of section-II that there is a significant difference in mean of test scores which partially fulfill the first second objective of the present study.

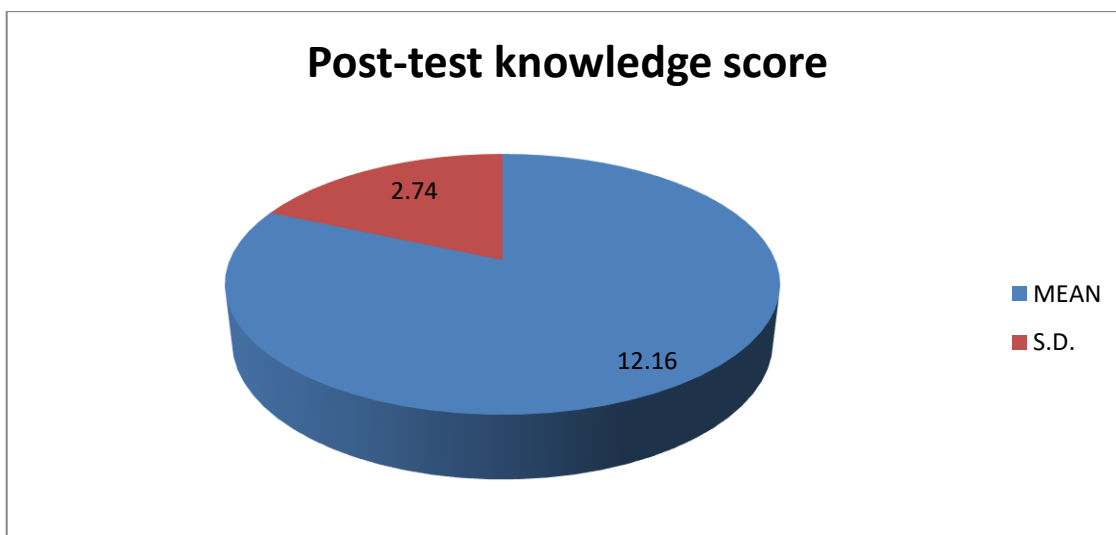


FIG.-2.2.2. - Mean (\bar{X}) and standard Deviation (s) of knowledge scores:

TABLE 2.2.3: Effectiveness of awareness package by calculating Mean, SD, Mean Difference and ‘t’ Value of Pre-test and Post-test knowledge.

| Knowledge Score of Women | Mean (\bar{X}) | S. D. (s) | Std. Error of Mean | D. F. | t-value | Significance |
|--------------------------|--------------------|-----------|--------------------|-------|---------|--------------|
| Pre-test | 5.62 | 2.12 | 0.46 | 49 | -13.92 | P<0.05 |
| Post-test | 12.16 | 2.74 | | | | |

When the mean and SD of pre-test and post-test were compared and 't' test was applied. It can be clearly seen that the 't' value was -13.92 and p value was <0.05 which clearly show that customized awareness program was very effective in increasing the knowledge of women.

SECTION-III Association of knowledge scores between test and selected demographic variables:

Table- 3.1 Association of age with pre-test scores:

| Age (in years) | Test scores | | | Total |
|---|---------------|-------------------|-----------------|-----------|
| | POOR (1-5) | AVERAGE (6-10) | GOOD (11-16) | |
| 21-25 | 11 | 2 | 0 | 13 |
| 26-30 | 18 | 4 | 0 | 22 |
| 31-35 | 10 | 2 | 0 | 12 |
| >35 | 2 | 1 | 0 | 3 |
| Total | 41 | 9 | 0 | 50 |
| X=0.55 p>0.05(Insignificant) | | | | |

The association of age test scores is shown in present table 3.1. The probability value for Chi-Square test is 0.55 for 3 degrees of freedom which indicated a insignificant valve (p>0.05). Hence, it is identified that there is a insignificant association between age and test scores. Moreover, it is reflected that age isn't influenced with the present problem.

Table- 3.2 Association of family monthly income with pre-test scores:

| Family Monthly Income | Test scores | | | Total |
|---|---------------|-------------------|-----------------|-----------|
| | POOR (1-5) | AVERAGE (6-10) | GOOD (11-16) | |
| <10000/- | 4 | 0 | 0 | 4 |
| 10001-15000 | 18 | 5 | 0 | 23 |
| 15001-20000 | 17 | 3 | 0 | 20 |
| >20000/- | 2 | 1 | 0 | 3 |
| Total | 41 | 9 | 0 | 50 |
| X= 1.69 p>0.05 (Insignificant) | | | | |

The association of family monthly income and test scores is shown in present table 3.2. The probability value for Chi-Square test is 1.69 for 3 degrees of freedom which indicated a insignificant value (p>0.05). Hence, it is identified that there is a insignificant association between monthly income and test scores.

Table-3.3. Association of marital status with pre-test scores:

| Marital status | Test scores | | | Total |
|---|---------------|-------------------|-----------------|-----------|
| | POOR (1-5) | AVERAGE (6-10) | GOOD (11-16) | |
| CLASS | | | | |
| Married | 28 | 8 | 0 | 36 |
| Single | 11 | 0 | 0 | 11 |
| Widow | 1 | 1 | 0 | 2 |
| Divorce | 1 | 0 | 0 | 1 |
| Total | 41 | 9 | 0 | 50 |
| X= 4.55 p>0.05 (Insignificant) | | | | |

The association of marital status test scores is shown in present table 3.3. The probability value for Chi-Square test is 4.55 for 3 degrees of freedom which indicated a insignificant valve (p>0.05). Hence, it is identified that there is a insignificant association between marital status and test scores. Moreover, it is reflected that marital status isn't influenced with the present problem.

Table- 3.4 Association of occupation with pre-test scores:

| Occupation CLASS | Test scores | | | Total |
|---|---------------|-------------------|-----------------|-----------|
| | POOR (1-5) | AVERAGE (6-10) | GOOD (11-16) | |
| House wife | 16 | 4 | 0 | 20 |
| Laborer | 16 | 2 | 0 | 18 |
| Teacher | 5 | 2 | 0 | 7 |
| Office- worker | 4 | 1 | 0 | 5 |
| Total | 41 | 9 | 0 | 50 |
| X= 1.17 p>0.05 (Insignificant) | | | | |

The association of age test scores is shown in present table 3.4. The probability value for Chi-Square test is 1.17 for 3 degrees of freedom which indicated occupation and test scores. Hence, it is identified that there is a insignificant association between occupation and test scores. Moreover, it is reflected that occupation age isn't influenced with the present problem.

8.RESULTS

The result of this study indicates that there was a significant increase in the post-test knowledge scores compared to pre-test scores of preventions of pre-eclampsia. The mean percentage knowledge score was observed 5.62 ± 2.12 in the pre-test and after implementation of customized awareness program post-test mean percentage was observed with 12.16 ± 2.74 .

9.CONCLUSION

Thus, after the analysis and interpretation of data we can conclude that the hypothesis RH1 that, there will be significance difference between the pre-test knowledge score with post-test knowledge score at the ($P < 0.05$) is being accepted.

Furthermore, customized awareness program regarding prevention of pre-eclampsia among women may consider as an effective tool when there is a need in lacking, bridging and modifying the knowledge.

10.LIMITATIONS-

- The study was limited to selected rural areas of Bhopal.
- The study was limited to 50 women.

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