**Original research article**

**ANXIETY AND COPING STRATEGIES ADOPTED BY ANTENATAL MOTHERS**

**ABSTRACT**

**Introduction**: Many physiological and psychological changes occur during pregnancy, which is seen as a normal part of a woman's reproductive life. The majority of expectant mother cope well with these changes, but many suffer greatly.

**Objectives:** The objectives of the study were, to assess the level of anxiety among antenatal mothers, to assess coping strategies adopted by antenatal mothers**,** to assess the relationship between anxiety level and coping strategies adopted, to find out the association between anxiety level with selected baseline variables and to compare coping strategies with selected baseline variables.

**Methods:** Non experimental descriptive survey was conducted among 150 antenatal mothers between 6 to 40 weeks of gestation attending antenatal clinic at selected hospitals in Kottayam District of Kerala, were selected by non-probability quota sampling.

**Results:** The result of the study showed that 52.67% antenatal mothers had high anxiety and 47.3% had low anxiety. There was no significant relationship between anxiety level and coping strategies of antenatal mothers (P>0.05). There was significant association between anxiety level and type of family (p<0.05). There was significant difference between coping strategies with occupation(p<0.05), type of family (p<0.05), place of residence (p<0.05), duration of pregnancy(p<0.05) and who planned their pregnancy (p<0.05).

**Conclusion:** This study comes to the following conclusion that antenatal mothers exhibit anxiety during pregnancy. Anxiety is more prevalent in third trimester followed by first trimester and high anxiety is observed in primigravida mothers. Antenatal women adopted problem-focused coping highest compared to emotion-focused coping and avoidant-focused coping. The less preferred items of coping were substance abuse and self-blame, rather they focused on religious activities, acceptance of pregnancy and emotional support.

***Keywords****: Antenatal mothers; Anxiety; Coping strategies,* *problem-focused coping, emotion-focused coping, avoidant-focused coping*

**1.INTRODUCTION**

Pregnancy is considered as a natural event in a woman's reproductive life, and it brings numerous physiological and psychological changes. While most pregnant women adjust well to these changes, many women experience significant distress and are more vulnerable to the onset/recurrence of mental illness.[[1]](#endnote-1),[[2]](#endnote-2)

Depression and anxiety are the most common mental illnesses occurring during pregnancy. Antenatal anxiety may have several adverse effects on both the mother and fetus.[[3]](#endnote-3),[[4]](#endnote-4),[[5]](#endnote-5) Appropriate coping responses can serve as a resilience resource for pregnant mothers and their infants, protecting them from the potentially detrimental impacts of exposure to prenatal stress.[[6]](#endnote-6)

Anxiety disorders were two to three times more common among pregnant women compared to the general population with the prevalence of 7.4%, 12.8%, and 12% during the first, second, and third trimesters respectively.1,[[7]](#endnote-7) Mental health during pregnancy is a leading public health concern because of its negative effect on both maternal and child outcomes and its significant economic cost to society if left untreated. A common mental health problem women experience during the antenatal period is anxiety.5

Untreated antenatal anxiety may lead to increased vulnerability of postnatal mental illness which may also result in an impaired interaction with the infant.[[8]](#endnote-8) Coping efforts may influence birth outcomes by reducing or preventing negative emotional, behavioral, cognitive and physiological responses to stressors. Adapting coping strategies resolves the stressor and thereby protects against adverse birth outcomes.5

The present study will help to identify the level of anxiety and coping strategies adopted by antenatal mothers and thereby, the nurses can provide close supervision and counselling to antenatal women and which will help to reduce the anxiety of antenatal mothers and decrease the unfortunate foetal outcome. The objectives of the study were, to assess the level of anxiety among antenatal mothers, to assess coping strategies adopted by antenatal mothers**,** to assess the relationship between anxiety level and coping strategies adopted, to find out the association between anxiety level with selected baseline variables and to compare coping strategies with selected baseline variables.

**2.METHODOLOGY**

**2.1 Study Design and Setting**

This research study was conducted as a non-experimental, descriptive survey at selected hospitals in Kottayam District of Kerala. Formal written permission was obtained from institutional ethics committee and administrator of hospital.

**2.2 Participants**

Antenatal mothers between 6 to 40 weeks of gestation attending the antenatal clinic of selected hospital and who fulfil the sampling criteria. Total one fifty antenatal mothers were selected using non probability quota sampling technique.In quota sampling, divide the population into mutually exclusive subgroups called strata and then recruit sample units until to reach the quota.

**2.3 Tool and Technique**

The tool used for collecting the data was state anxiety scale (SAS) to assess the level of anxiety and brief- coping orientation to problems experienced inventory (Brief - COPE) to assess the adopted coping strategies. Self-reported questioning was used to collect data from antenatal mothers.

**Tool 1: Questionnaire to assess the Baseline characteristics**

The Baseline characteristics includes 15 items were age, education, occupation, type of the family, family income, place of residence, level of family support, number of pregnancies, any history of problem during the present and past pregnancy, duration of pregnancy, number of pregnancies, number of living children, any serious health problems in children, present pregnancy is planned or unplanned.

**Tool 2: State anxiety scale (SAS)**

State Anxiety Scale (SAS) is a standardized self-report questionnaire developed by Dr Govind Pal and Dr Roma Pal at Punjab University consists of 30 items that measure state anxiety in the current situation or time period. Each item was scored on a three-point rating scale such as ‘always, sometimes and never’ against the score of 1, 2, and 3 respectively. The Positive items were 1, 2, 4, 5, 6, 7, 10, 11, 15, 16, 19, 20, 22, 24, 25, 26, 27, 28, 29 and 30 were scored 3,2,1. Negative items were item number 3,8,9,12,13,14,17,18,21 and 23 and were scored reversely. Level of anxiety were categorized into high or low anxiety through a median split procedure. The total score ranges between 30 to 90.

**Tool 3: Brief- Coping Orientation to Problems Experienced Inventory (Brief COPE)**

Brief-Coping Orientation to Problems Experienced Inventory (Brief COPE) was developed by Carver C.S. (1997). It consisted of 28-item self-report questionnaire, and has been designed to measure effective and ineffective methods of coping with stressful life events. Each item were rated on a four-point Likert scale such as ‘I haven't been doing this at all, I've been doing this a little bit, I've been doing this a medium amount and I've been doing this a lot’ against scores of 1,2,3 and 4 respectively.

The Brief Cope comprised 14 subscales of two items each with 28 items under three major domains. The three domains were emotion-focused, problem-focused and avoidant coping strategies. Emotion-focused coping strategies include (religion, positive reframing, and the use of emotional support, acceptance, and humour). Problem-focused coping strategies include (the use of instrumental support, active coping, and planning). Avoidant -coping strategies include (self-distraction, denial, venting, substance use, behavioural disengagement and self-blame). The coping strategies and its domains adopted were identified by calculating mean score. The Brief- Cope with its domains and item number is presented in table number one.

**2.4 Data Collection**

Formal written permission was obtained from institutional ethics committee and administrator of hospital. The investigator introduced herself and obtained informed consent from antenatal women between 6 to 40 weeks of gestation attending antenatal clinic. The samples were selected by non-probability quota sampling 50 from each trimester. Data was collected using self-administered questionnaires include (i) Questionnaire to assess the baseline characteristics (ii) State anxiety scale (SAS) to assess the level of anxiety (iii) Brief COPE to assess the adopted coping strategies. The purpose of the study was explained, Informed and written permission was obtained from each of the study participants and following this, questionnaires were distributed, and subjects were asked to fill them. The confidentiality of their responses was assured.

* 1. **Statistical Analysis**

The data obtained was coded and entered in a Microsoft Excel worksheet and analysed using the statistical software Statistical Package for Social Sciences (IBM SPSS Statistics 27). Data were analysed by using descriptive and inferential statistics. The data related to baseline variables were analysed by using descriptive statistics such as frequency and percentage. Anxiety level was calculated using the median split procedure. Coping strategies adopted were analysed by using mean and standard deviation. For testing the hypothesis, nonparametric test was used as the data did not follow the normal distribution. Karl Pearson’s correlation co-efficient test was used to assess the relationship between anxiety level and coping strategies of antenatal mothers. Chi-square test was used to find out the association between the anxiety level of antenatal mothers with baseline variables. Kruskal Wallis test and Mann Whitney test was used to compare coping strategies with baseline variables.

**3.RESULTS**

**3.1 Description of sample characteristics**

In the present study 65% of antenatal mothers were in the age group of 25 to 31 years, 28% were in the age group of 32 to 38 years and 7% were in the age group of 18 to 24 years.(fig.1) Graduate antenatal mothers were 62%, postgraduate were 33% and 5% were educated up to diploma.(fig.2).Among 150 antenatal mothers 46.67% of the antenatal mother were professionals, 24% were homemakers and only 2% were govt employers. (table.1). With respect to monthly income majority (76%) of antenatal mothers had monthly income above ₹15000 and 5% of them had monthly income below ₹5000.(fig.3). The majority (82.67%) of antenatal mothers belonged to nuclear family and 1% belonged to extended family. (fig.4). With respect to place of residence 50.7% were living in urban areas and 49.3% were living in rural area.(table.2).Only 2% of antenatal mothers had a low level of family support and 62.67% had high level of family support.(fig.5). Among 150 antenatal mothers 56.67% were primigravida and 43.33% were multigravida. (table.3). With respect to the number of living children 35.33% of antenatal mothers had one child and 6.67% had two children. (fig.6). With respect to planning for pregnancy 91% of antenatal mothers planned their pregnancy and 9% did not plan their pregnancy.(fig.7). Majority of antenatal women did not have any history of health problems during the present (86%) and past (90%) pregnancy. GDM was diagnosed for 7.33% and 4.6% in present and past pregnancy and PIH was for 2.67% and 2% in present and past pregnancy respectively. (table.4)

**Figure 1:Percentage of antenatal mothers based on age (n=150)**

**Figure 2: Percentage of antenatal mothers based on education (n=150**

**Table 1 :Frequency distribution and percentage of antenatal mothers based on occupation (n=150)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Demographic Variables | | Frequency | | Percentage |
| Occupation | |  | |  |
|  | Homemaker | 36 | 24.00 | |
| Private Employee | 23 | 15.33 | |
| Govt Employee | 3 | 2.00 | |
| Self Employed | 5 | 3.33 | |
| Semi Professional | 13 | 8.67 | |
| Professional | 70 | 46.67 | |

Data

**Figure 3:Percentage of antenatal mothers based on monthly income. (n=150)**

**Table 2:Frequency distribution and percentage of antenatal women based on place of residence. (n=150)**

|  |  |  |  |
| --- | --- | --- | --- |
| Demographic Variables | | Frequency | Percentage |
| Place of Residence | |  |  |
|  | Urban | 76 | 50.7 |
| Rural | 74 | 49.3 |

**Figure 4:Percentage of antenatal mothers based on type of family (n=150)**

**Figure 5:Percentage of antenatal mothers based on level of family support.(n=150)**

**Table 3:Frequency distribution and percentage of antenatal mothers based on gravidity.(n=150)**

|  |  |  |  |
| --- | --- | --- | --- |
| Demographic Variables | | Frequency | Percentage |
| Number of Pregnancy | |  |  |
|  | Primigravida | 85 | 56.67 |
| Multigravida | 65 | 43.33 |

**Figure 6: Percentage of antenatal mothers based on number of living children.(n=150)**

**Figure 7: Percentage of antenatal mothers based on planning of pregnancy. (n=150)**

**Table 4:Frequency distribution and percentage of antenatal women based on history of health problems during present and past pregnancy. (n=150)**

|  |  |  |  |
| --- | --- | --- | --- |
| Health problem | | Frequency | Percentage |
| Present pregnancy | |  |  |
|  | Nil | 129 | 86.00 |
| GDM | 11 | 7.33 |
| PIH | 4 | 2.67 |
| Uterine Fibroid | 1 | 0.67 |
| Anemia | 1 | 0.67 |
| Thyroid | 4 | 2.67 |
| Past pregnancy | |  |  |
|  | Nil | 135 | 90.00 |
| Abortion | 2 | 1.33 |
| Uterine Fibroid | 1 | 0.67 |
| GDM | 7 | 4.67 |
| PIH | 3 | 2.00 |
| Thyroid | 2 | 1.33 |

**3.2 Level of anxiety among antenatal mothers.**

Among 150 antenatal mothers 52.67% of antenatal mothers had high anxiety and 47.3% had low anxiety.(table 5). The mean value of the anxiety score was 47.193 with a standard deviation of 8.4263. The median and mode value was 47 and 45 respectively.(table 6). Anxiety was prevalent at all stages. High anxiety was observed in antenatal mothers in third trimester (60%) compared to first trimester (52%).(table 7). Among the antenatal mothers 45% of primigravida mothers had low level of anxiety, 55% had severe anxiety whereas in multigravida 51% had a low level of anxiety, and 49% had severe anxiety.(table 8).

**Table 5 :Distribution of subject according to the level of anxiety. (n=150)**

|  |  |  |
| --- | --- | --- |
| Level of anxiety | Frequency | percentage |
| Low | 71 | 47.3 |
| High | 79 | 52.67 |

**Table 6:Mean, median, mode, and standard deviation of anxiety score (n=150)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Mean | SD | Median | Mode |
| Anxiety | **47.193** | **8.4263** | **47** | **45** |

**Table 7 :Frequency distribution and percentage of antenatal women based on level of anxiety and duration of pregnancy. (n=150)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Duration of pregnancy** | **Low Anxiety** | | **High Anxiety** | |
|  | **F** | **%** | **F** | **%** |
| **First trimester** | 24 | 48 | 26 | 52 |
| **Second trimester** | 27 | 54 | 23 | 46 |
| **Third trimester** | 20 | 40 | 30 | 60 |

**Table 8:Frequency distribution and percentage of antenatal women based on level of anxiety and gravidity (n=150)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Gravidity** | **Low Anxiety** | | **High Anxiety** | | |
|  | **F** | **%** | | **F** | **%** |
| **Primigravida** | 38 | 45 | | 47 | 55 |
| **Multigravida** | 33 | 51 | | 32 | 49 |

**3.3Coping strategies adopted by antenatal mothers**

The mean value of the total coping score was 2.60 with a standard deviation of 0.51.(table 9). Among 150 antenatal mothers problem-focused domain of coping strategies had the highest mean score (2.8683±0.59) followed by emotion-focused coping strategies (2.7139±0.53) and avoidant-focused coping strategies (2.2083±0.59).(table 10). The most commonly used coping strategies were religion (3.14±0.78), acceptance (3.02±0.8) followed by emotional support (3.01±0.75), use of informational support (2.99±0.78), positive reframing (2.87±0.68) and active coping (2.83±0.68). The less common strategies were self-blame (1.99±0.95) and substance use (1.48±0.91).(table 11)

**Table 9:Mean and standard deviation of coping score of antenatal mothers. (n=150)**

|  |  |  |
| --- | --- | --- |
| Total coping score | Mean | SD |
|  | **2.60** | **0.51** |

**Table 10:Mean and standard deviation of coping domains adopted by antenatal mothers.(n=150)**

|  |  |  |
| --- | --- | --- |
| Coping domain | Mean | SD |
| Avoidant Focused Coping | 2.2083 | 0.59758 |
| Problem Focused Coping | 2.8683 | 0.59285 |
| Emotion-focused Coping | 2.7139 | 0.53620 |

**Table 11:Coping subscale score among antenatal mothers. (n=150)**

|  |  |  |  |
| --- | --- | --- | --- |
| Coping domain | Coping subscale | Mean | Std. Deviation |
| Problem-focused coping | Active Coping | 2.83 | 0.68 |
| Use of informational support | 2.99 | 0.78 |
| Positive reframing | 2.87 | 0.68 |
| Planning | 2.78 | 0.79 |
| Emotion-focused coping | Emotional Support | 3.01 | 0.75 |
| Venting | 2.65 | 0.83 |
| Humour | 2.47 | 0.75 |
| Acceptance | 3.02 | 0.80 |
| Religion | 3.14 | 0.78 |
| Self-blame | 1.99 | 0.95 |
| Avoidant focused coping | Self-Distraction | 2.79 | 0.69 |
| Denial | 2.45 | 0.87 |
| Substance Use | 1.48 | 0.91 |
| Behavioral Disengagement | 2.12 | 0.97 |

* 1. **Relationship between level of anxiety and coping strategies of antenatal mothers.**

There was no significant relationship between level of anxiety and coping strategies of antenatal mothers (table.12). There was no relationship between level of anxiety with domains such as avoidant-focused coping, problem-focused coping, and emotional-focused coping. (table.12)

**Table 12:Relationship between level of anxiety and coping strategies of antenatal mothers.(n=150)**

|  |  |  |
| --- | --- | --- |
|  | r value | p value |
| Anxiety Vs Avoidant-focused coping | - 0.05 | 0.547 |
| Anxiety Vs Problem- focused coping | 0.157 | 0.055 |
| Anxiety Vs Emotional-focused coping | 0.017 | 0.834 |
| Anxiety Vs Total coping score | 0.048 | 0.563 |

**3.5 Association between level of anxiety of antenatal mothers with baseline variables.**

There was significant association between the level of anxiety and type of family (p= 0.039).(table 13). There was no significant association between level of anxiety and baseline variables such as age, education, occupation, monthly income, place of residence, level of family support, number of pregnancies, number of living children, duration of pregnancy, planning of pregnancy, and health problems during the pregnancy. (table 14)

**Table 13:Association between level of anxiety of antenatal mothers with the type of family. (n=150)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Type of family | Anxiety level | | | |  |  |  |
| **Low** | | **High** | | **df** | **ᵡ2** | **P value** |
| **f** | **%** | **f** | **%** |
| Nuclear | 63 | 42 | 61 | 40.67 | 2 | 5.134 | 0.039\* |
| Joint | 7 | 4.67 | 18 | 12 |
| Extended | 0 | 0 | 1 | 0.67 |

\* significant at 0.05 level

**Table 14:Association between level of anxiety of antenatal mothers with baseline variables. (n=150)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SI. No | Baseline variables | ᵡ2 | df | P value |
| 1. | Age | 1.689 | 2 | 0.430 |
| 2. | Education | 1.871 | 2 | 0.379 |
| 3. | occupation | 3.523 | 5 | 0.645 |
| 4. | Monthly Income | 2.121 | 1 | 0.145 |
| 5. | place of residence | 1.338 | 1 | 0.247 |
| 6. | Level of family support | 3.515 | 2 | 0.150 |
| 7. | Number of pregnancies | 0.776 | 1 | 0.378 |
| 8. | Number of living children | 2.908 | 2 | 0.234 |
| 9. | Duration of pregnancy | 0.234 | 2 | 0.371 |
| 10. | Planning of pregnancy | 2.031 | 1 | 0.154 |
| 11. | Health problems during the present pregnancy | 6.865 | 5 | 0.168 |

**3.6. Comparison between coping strategies of antenatal mothers with baseline variables**

Scores of avoidant-focused coping and emotional-focused coping differ significantly with respect to the occupation of antenatal mothers (p<0.05). Scores of all domains of coping strategies differ significantly with respect to the type of family of antenatal mothers (P=<0.01). Scores of avoidant-focused coping differ significantly with respect to the duration of pregnancy of antenatal mothers (p=0.001). All domains of coping strategies were significantly differed with the place of residence of antenatal mothers (p value<0.01). Post hoc test showed antenatal women from urban areas exhibited higher avoidant-focused coping, problem-focused coping and emotional-focused coping (p <0.05). Avoidant-focused coping and emotional-focused coping differed significantly with respect to planning of pregnancy by antenatal mothers (p=0.016 and 0.002). (table.15)

**Table 15: Association between coping strategies of antenatal mothers with baseline variables. (n=150)**

|  |  |  |  |
| --- | --- | --- | --- |
| Baseline variable | Avoidant Focused Coping | Problem Focused Coping | Emotion-focused Coping |
| Occupation | P<0.05 | P>0.05 | P<0.05 |
| Type of Family | P<0.01 | P<0.01 | P<0.01 |
| Duration of Pregnancy | P<0.001 | P>0.001 | P>0.001 |
| Place of Residence | P<0.01 | P <0.01 | P<0.01 |
| Planning of pregnancy | P <0.05 | P>0.05 | P<0.05 |

**4.DISCUSSION**

The first objective of the study was to assess the level of anxiety among antenatal mothers. In the present study, high anxiety and low anxiety in antenatal mothers were identified as 52.67% and 47.3% respectively.

The present study findings were inconsistent with the study findings on the prevalence of stress, anxiety and depression among pregnant women. The result revealed that 29.5% of participants had minimal anxiety symptoms,44.5% had mild-to-moderate anxiety symptoms and 26% had severe anxiety symptoms. [[9]](#endnote-9)

In the present study, 45% of primigravida mothers had a low level of anxiety, and 55% had severe anxiety whereas in multigravida 51% had a low level of anxiety and 49% had severe anxiety.

The present study findings were consistent with the study findings on comparing the level of anxiety and stress during pregnancy among primigravida and multigravida mothers. It showed that 58.5% of primigravida mothers had severe level of anxiety and in multigravida mothers, 13.8% had severe level of anxiety, 50.8% had moderate level of anxiety and 35.4% had a minimal level of anxiety. [[10]](#endnote-10)

The findings of the present study showed that anxiety was prevalent at all stages. High anxiety was observed in antenatal mothers in third trimester (60%) compared to first trimester (52%). The present study findings were consistent with the study findings on the prevalence and course of antenatal anxiety and depression across four stages of pregnancy: first trimester, second trimester, third trimester, and 6 weeks postpartum. The result showed that more than one-half (54%) of the women had antenatal anxiety. Anxiety was more prevalent at all stages and is more prevalent and severe in the first and third trimesters with OR, 2.66, *P*=.004 in the first trimester; OR 3.65, *P*<.001 in the second trimester; adjusted OR 3.84, *P*<.001 in the third trimester. [[11]](#endnote-11)

The second objective of the study was to assess coping strategies adopted by antenatal mothers. The present study showed that the problem-focused domain of coping strategies had the highest mean score (2.8683±0.59) followed by emotion-focused coping strategies with mean score (2.7139±0.53) and avoidant-focused domain of coping strategies with mean score (2.2083±0.59).

The findings of the present study are congruent with the result of the study to assess the stress and coping strategies among pregnant women showed that the problem-focused domain of coping strategies had a higher mean score (2.39±.31) followed by emotion-focused coping strategies with a mean score (2.25±.28) and dysfunctional domain of coping strategies with mean score (1.89±.22). [[12]](#endnote-12)

This study showed that the most commonly used coping strategies were religion (3.14±0.78), and acceptance (3.02±0.8) followed by emotional support (3.01±0.75), use of informational support (2.99±0.78), positive reframing (2.87±0.68) and active coping (2.83±0.68). The less common strategies were self-blame (1.99±0.95) and substance use (1.48±0.91).

The findings of the present study are congruent with the result of the study to assess the stress and coping strategies among pregnant women. The study showed that the most commonly used coping strategies were self-distraction followed by use of emotional support, use of instrumental support, positive reframing, venting and religion. The less common strategy used was substance use followed by humor10

The third objective of the study was to assess the relationship between anxiety level and coping strategies of antenatal mothers. The present study showed that there was no significant relationship between anxiety level and coping strategies of antenatal mothers and there was no relationship between total score of anxiety with domains such as avoidant-focused coping, problem-focused coping and emotional-focused coping.

The findings of the present study are inconsistent with the result of the study to assess the level of anxiety and coping strategies adopted by antenatal mothers. It showed that there was a negative correlation between coping strategy and anxiety scores of antenatal mothers.[[13]](#endnote-13)

The fourth objective of the study was to find out the association between the anxiety level of antenatal mothers with selected baseline variables. The result showed that there was significant association between the level of anxiety and type of family (p= 0.039).

The findings of the present study were congruent with the result of the study to assess the stress and coping strategies among pregnant women found that there was statistically significant association of level of stress with type of family (p=0.002). 10

The fifth objective of the study was to compare the coping strategies of antenatal mothers with selected baseline variables. There was significant difference between coping strategies of antenatal mothers with occupation (p<0.05), type of family (p<0.05), place of residence (p<0.05), duration of pregnancy (p<0.05) and who planned their pregnancy (p<0.05).

The findings of the present study were congruent with the result of the study to find out the stress and coping strategies among pregnant women. The result showed that there was statistically significant association of coping strategies with educational status (p=<0.001), monthly family income (p=0.014), type of family (p=<0.001), type of pregnancy (p=0.002) and mode of previous delivery (p=0.022).10

**5.CONCLUSION**

This study comes to the following conclusion that antenatal mothers exhibit anxiety during pregnancy. Anxiety is more prevalent in third trimester followed by first trimester and high anxiety is observed in primigravida mothers. Antenatal women adopted problem-focused coping highest compared to emotion-focused coping and avoidant-focused coping. The less preferred items of coping were substance abuse and self-blame, rather they focused on religious activities, acceptance of pregnancy and emotional support. There was no significant relationship between anxiety level and coping strategies of antenatal mothers(p>0.05). There was significant association between the level of anxiety and the type of family (p= 0.039). There was significant difference between coping strategies of antenatal mothers with occupation(p<0.05), type of family (p<0.05), place of residence (p<0.05), duration of pregnancy(p<0.05) and who planned their pregnancy (p<0.05).

**FUTURE RESEARCH DIRECTIONS**

* A similar study can be conducted on a large sample.
* The same study can be replicated in another setting.
* A longitudinal study can be conducted on the prevalence of anxiety at various levels of pregnancy and postpartum.
* A study on the impact of antenatal anxiety on maternal health, postpartum recovery and maternal-infant attachment can be conducted.
* Can conduct a systematic review on anxiety and coping strategies adopted by antenatal and postnatal women.

**CONSENT**

As per the international standards or university standards**,** participants written consent has been collected and preserved by author.

**ETHICAL APPROVAL**

As per the international standards or university standardsFormal written permission was obtained from institutional ethics committee and administrator of Mar Sleeva Medicity Palai (001/IEC/2022)

**REFERENCES**

1. Priyambada, K., Pattojoshi, A., & Bakhla, A. K. (2017). A study of antenatal anxiety: comparison across trimesters. Int J Reprod Contracept Obstet Gynecol, 6(5), 1810-1813. [↑](#endnote-ref-1)
2. Rezaee, R., & Framarzi, M. (2014). Predictors of mental health during pregnancy. Iranian journal of nursing and midwifery research, 19(7 Suppl1), S45-S50. [↑](#endnote-ref-2)
3. Bedaso, A., Adams, J., Peng, W., & Sibbritt, D. (2021). The association between social support and antenatal depressive and anxiety symptoms among Australian women. BMC pregnancy and childbirth, 21, 1-12. [↑](#endnote-ref-3)
4. Cena, L., Mirabella, F., Palumbo, G., Gigantesco, A., Trainini, A., & Stefana, A. (2020). Prevalence of maternal antenatal anxiety and its association with demographic and socioeconomic factors: A multicentre study in Italy. European Psychiatry, 63(1), e84. [↑](#endnote-ref-4)
5. Dennis, C. L., Falah-Hassani, K., & Shiri, R. (2017). Prevalence of antenatal and postnatal anxiety: systematic review and meta-analysis. The British Journal of Psychiatry, 210(5), 315-323. [↑](#endnote-ref-5)
6. Firouzbakht, M., Rahmani, N., Sharif Nia, H., & Omidvar, S. (2022). Coping strategies and depression during the COVID-19 pandemic in pregnant women: a cross sectional study. BMC psychiatry, 22(1), 153. [↑](#endnote-ref-6)
7. Warghane, R., Moon, S., Mahakarkar, M., Teltumade, A., & Taksande, V. (2021). To Assess the Level of Anxiety and Coping Strategies Adopted by Antenatal Mothers. [↑](#endnote-ref-7)
8. Biaggi, A., Conroy, S., Pawlby, S., & Pariante, C. M. (2016). Identifying the women at risk of antenatal anxiety and depression: A systematic review. Journal of affective disorders, 191, 62-77. [↑](#endnote-ref-8)
9. Khouj, M. A., Albasri, S., Albishri, A. A., Softa, S. M., Almaslamani, A. S., & Ahmad, H. M. (2022). Prevalence of stress, anxiety, and depression among pregnant women in Jeddah. Cureus, *14*(7). [↑](#endnote-ref-9)
10. Sharma s. a comparative study to assess the level of anxiety and stress during pregnancy among primigravida and multigravida mothers in selected hospitals of shimla (hp). Available from http://www.casirj.com. Accessed on 2023. [↑](#endnote-ref-10)
11. Lee, Antoinette M., Siu Keung Lam, Stephanie Marie Sze Mun Lau, Catherine Shiu Yin Chong, Hang Wai Chui, and Daniel Yee Tak Fong. "Prevalence, course, and risk factors for antenatal anxiety and depression." *Obstetrics & Gynecology* 110, no. 5 (2007): 1102-1112. [↑](#endnote-ref-11)
12. Tripathi, P., & Devkota, G. (2020). Stress and coping strategies among pregnant women attending antenatal clinic of a teaching hospital in Eastern Nepal. *Nepal Journal of Obstetrics and Gynaecology*, *15*(2). [↑](#endnote-ref-12)
13. Faramarzi, M., Amiri, F. N., & Rezaee, R. (2016). Relationship of coping ways and anxiety with pregnancy specific-stress. *Pakistan journal of medical sciences*, *32*(6), 1364. [↑](#endnote-ref-13)