A STUDY TO COMPARE THE STRESS LEVEL AND COPING STRATEGIES OF EXPECTANT FATHERS AND EXPECTANT MOTHERS, ATTENDING ANTENATAL CLINIC IN SELECTED HOSPITAL OF PANIPAT, HARYANA

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Abstract

It is normal for a pregnant woman to be psychologically unsteady and tensed about her health, baby's wellbeing and the likely changes which will take place in her life after the birth of the child. Mild stress during antenatal period, is good for optimal development of the fetus, but if it exceeds it may lead to long term effect on the foetus, and alter the development of the foetal nervous system.

Keywords*: Stress, Expectant Fathers, Esxpectant Mothers, Antenatal Clinic, Pregnancy*

INTRODUCTION

Pregnancy is a natural life event for women, and besides it a term that, bio-psychosocial changes happen and risk of experiencing factors which may cause anxiety and stress, are high (**Eskici et al., 2012**). Pregnancy and motherhood term also is a process that predisposition of women to psychiatric diseases such as depression, anxiety disorder, may increase **(Andersson etal., 2003).** It was stated with studies that, in the pregnancy, anxiety and stress increase pregnancy and birth complications and cause low birth weight, preterm labor and intrauterine growth deficiency.[1]

Psychosocial stress during pregnancy is, "the imbalance that antenatal mother feels when she cannot cope with demands, which are shown both behaviourally and physiologically". The emotions and experiences during antenatal period impinge on her developing foetus. Some researchers believe that severe stress during pregnancy harms mother infant relationship and reduce mother's ability to play motherly role.[2]

It is normal for a pregnant woman to be psychologically unsteady and tensed about her health, baby's wellbeing and the likely changes which will take place in her life after the birth of the child. Mild stress during antenatal period, is good for optimal development of the fetus, but if it exceeds it may lead to long term effect on the foetus, and alter the development of the foetal nervous system. During pregnancy a women's body changes in many ways due to the effect of hormones. These changes can sometimes be uncomfortable and may lead to stress during pregnancy.[2]

Parenting in itself can be stressful, even if the parent's view of their child is positive. Parenthood is often associated with a greater number of changes in the lives of mothers than in those of fathers because mothers are usually the primary caregivers. Parental stress has been defined as the adverse psychological reaction to the demands of being a parent and can affect parenting behavior and the quality of the dyadic parent–child interaction. Few studies have examined the differences between mothers' and fathers' stress in relation to their parental role models and

sense of coherence (SOC).[3]

NEED FOR THE STUDY
Anxiety and depression are important risk factors in preterm labor. Emotional stress and especially depression and anxiety were related with increase in birth complications, negative effects on newborn health, and in addition, pregnancy with anxiety, related with appearance of behavioral and emotional problems in child **(O'connor et al., 2002; Berle et al., 2005).** In a study which was conducted by Lewellyn and friends, it was stated that anxiety and depressive symptoms in pregnancy are related with postpartum depression after pregnancy and depressive symptoms were seen in pregnant women with a rate of %70 and more **(Lewellyn et al., 1997).**[1]
Anxiety and depression in pregnancy, is an important situation because of the reason that it affects the wellness of mother and fetus and triggers postpartum depression, it must be early diagnosed and treated.[1]
A stressful event prior to delivery affects the infant's health and is also associated with the mental health problems in childhood and adulthood. A recent review suggested that stress during antenatal period present for a long term has adverse effect on the mother and child.[2]

OBJECTIVES
1. To assess the stress level among expectant fathers and expectant mothers.
2. To assess the coping strategies among expectant fathers and expectant mothers.
3. To compare the stress level between expectant father and expectant mothers.
4. To compare the coping strategies between expectant fathers and expectant mothers.
5. To determine the association between stress level and socio demographic variables of expectant fathers and expectant mothers.
6. To determine the association between coping strategies and socio demographic variables of expectant fathers and expectant mothers.

HYPOTHESIS
H_1: There will be significant association between stress level and socio demographic variables of expectant fathers and expectant mothers.

H_2: There will be significant association between coping strategies and socio demographic variables of expectant fathers and expectant mothers.

REVIEW OF LITERATURE
I: Literatures Related to Prevalence of Stress Among Expectant Fathers and Expectant Mothers.
II: Literatures Related to the Coping Strategies Among Expectant Fathers and Expectant Mothers.
III: Literatures Related to Comparison of Stress and Coping Strategies Among Expectant Fathers and Expectant Mothers.

METHODOLOGY
Research methodology refers to controlled investigation of the ways of obtaining, organizing

and analyzing data. A methodological study addresses the development, validation and evaluation of research tools and techniques.

Methodology of research organizes all the components of study in a ways that is most likely to lead to valid answers to the problem that have been posted.**(Burns and Groove,2002).**

RESEARCH APPROACH

Research approach is the umbrella that covers the basic procedure for conducting research.**(Treece and Treece,1986)**

According to the problem selected for the study and objectives to be accomplished, Quantitative research approach was considered as an appropriate research approach for this study.

RESEARCH DESIGN

Research design is the overall plan for addressing a research question including specification for chancing the study integrity.**(Polit and Beck,2004).**

Research design used for this study will be comparative design involves comparing and contrasting two or more samples of study. Subjects on one or more variables of an at a single point of time.

Figure 1 : Schematic Diagram of Methodology
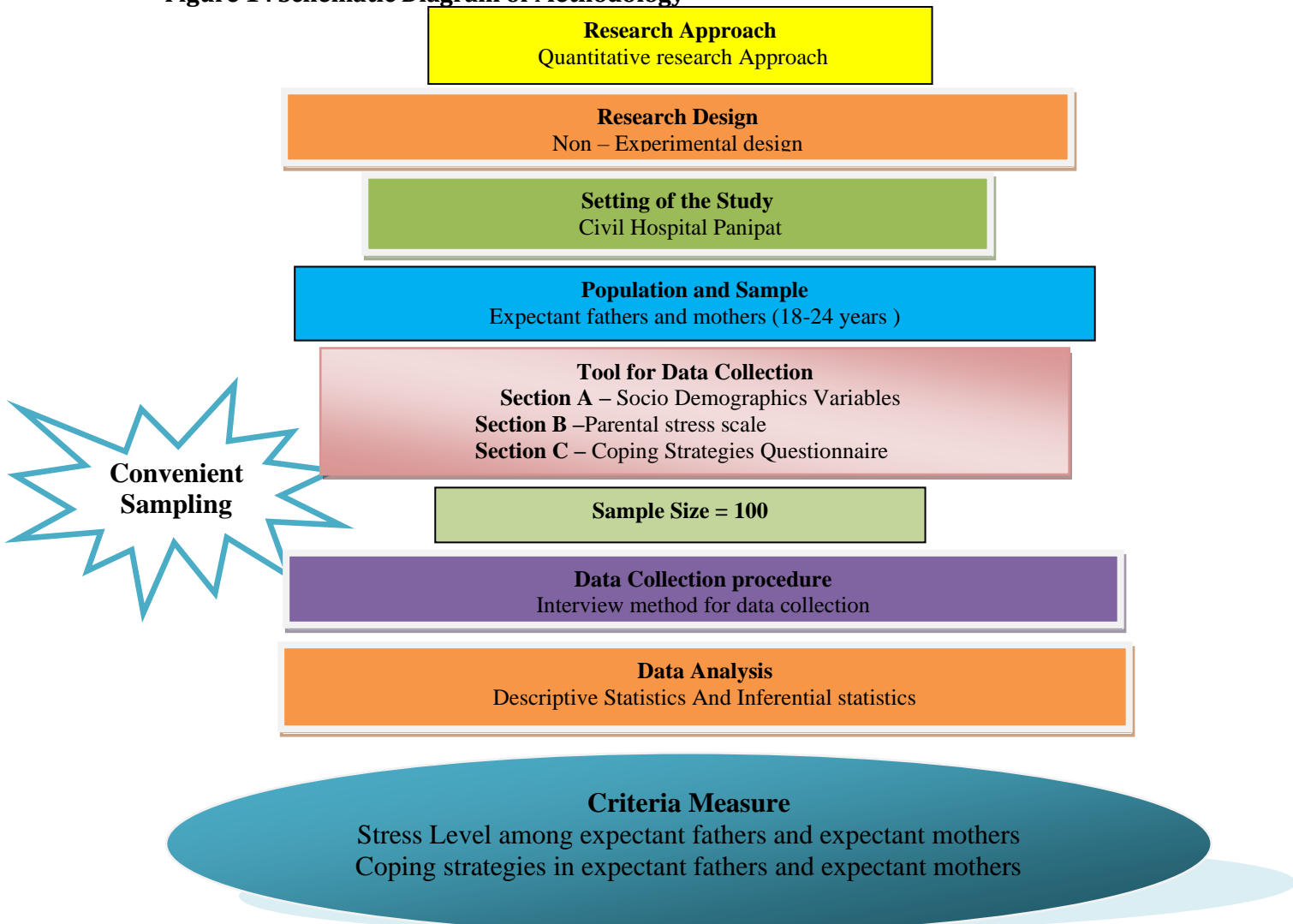
Criteria for Sample Selection

Inclusion Criteria:

- Expectant fathers and expectant mothers who will visit antenatal clinic during data collection period.
- Expectant fathers and expectant mothers above 18 years of age.
- Expectant fathers and expectant mothers who expecting their baby for the first time.
- Expectant fathers and expectant mothers who were willing to participate in the study.
- Expectant fathers and expectant mothers who can read and write Hindi and English.

Exclusion Criteria:

- Expectant fathers and expectant mothers who were not willing to participate in the study.
- Expectant mothers who were not coming with their spouse.

Tool for Data Collection

The instrument selected in a research must be the vehicle that obtain best data for drawing construction of the study.**(Treece E.W, and Treece J.W,1986)**

In the present study the researcher will use the PERCIEVE STRESS SCALE to measure level of stress among expectant fathers and expectant mothers. The researcher will also use coping inventory to check their coping strategies.

The selected research tool will consist of 3 sections:

- Section A : Socio- demographic variables
- Section B : Parental Stress Scale
- Section C : Coping Strategies Questionnaire

DATA ANALYSIS AND INTERPRETATION

This chapter represents the analysis of collected data and interpretation of the data according to the objectives of the study. The collected data were analysed with the help of SPSS – version 20. The detailed analyses of the study were presented under various sections according to the objectives.

Section – A: Distribution of Subjects According to Socio – Demographic Variables

Table – 1: Frequency and Distribution of Mother's According to Selected Socio – Demographic Variables.

Table – II: Frequency and Percentage Distribution of Father's According to Selected Socio – Demographic Variables.

Section – B: Distribution of Subjects According to Level of Stress

Table – III: Frequency and Percentage Distribution of Mother and Father According to Level of Stress

Section – C: Distribution of Subjects According to Level of Coping

Table – IV: Frequency and Percentage Distribution of Mothers and Fathers According to Level of Stress

Section – D: Correlation between Mothers level of stress and level of coping

Table – V: Level of correlation between mothers stress and Mothers Coping Level

Table VI: Level of Correlation between Fathers stress and Fathers Coping Level

Section – E: Level of Association between Subjects Level of Stress and Selected Socio-Demographic Variables

Table VI: Level of Association between Mothers level of stress and selected socio-demographic variables

Table VII: Level of Association between Fathers level of stress and selected socio-demographic variables.

Section – A

Table – I: Frequency and Distribution of Mother's According to Selected Socio – Demographic Variables.   (n = 50)

S. No	Socio-Demographic Variables	Frequency	Percentage
1.	**Age (Years)**		
	a. 18 – 21	10	20
	b. 22 – 25	27	54
	c. 26 – 31	13	26
2.	**Educational Status**		
	a. Illiterate	3	6
	b. Primary	20	40
	c. Secondary	14	28
	d. Diploma / Degree	13	26
3.	**Occupational Status**		
	a. Un employed	17	34
	b. Self – employed	17	34
	c. Govt – employed	16	32
4.	**Religion**		
	a. Hindu	29	58
	b. Muslim	10	20
	c. Christian	6	12
	d. Sikh	5	10

The above table shows the frequency and percentage distribution of subjects (Mothers)

With regard to the age, majority of the subjects 27 (54%) were in the age group between 22 – 25 years. Next to them were subjects in age between 26 – 31 years 13 (26%) subjects in age between 18 – 21 years were 10 (20%).

Educational status of the mother shows that majority of the subjects 20 (40%) had primary education. Subjects who had secondary education were 14 (28%). Subjects who had diploma / graduate level of education were 13 (26%). Very few subjects 3 (6%) were illiterates.

Occupational status of the subjects reveals equal number of subjects 17 (34%) were unemployed and self – employed respectively. Those subjects who were govt employed was 16 (32%).

Religion of the subjects shows that majority 29 (58%) were Hindus; those who belongs to Muslim religion were 10 (20%). Christians were 6 (12%) and subject who belongs to Sikh religion was 5 (10%).

Table – II: Frequency and Distribution of Father's According to Selected Socio – Demographic Variables.

(n = 50)

S. No	Socio-Demographic Variables	Frequency	Percentage
1.	**Age (Years)**		
	a. 21 – 25	15	30
	b. 26 – 30	21	42
	c. 31 – 36	12	24
	d. 37 – 40	2	4
2.	**Educational Status**		
	e. Illiterate	3	6
	f. Primary	5	10
	g. Secondary	17	34
	h. Diploma / Degree	25	50
3.	**Occupational Status**		
	d. Un employed	8	16
	e. Self – employed	28	56
	f. Govt – employed	14	28
4.	**Religion**		
	d. Hindu	29	58
	e. Muslim	10	20
	f. Christian	6	12
	g. Sikh	5	10

The above table shows the frequency and percentage distribution of subjects (Fathers)
Age o the subjects reveals, majority of the subjects 21 (42%) were in age between 26 – 30 years. Second majority of the subjects 15 (30%) were in age between 21 – 25 years. Subjects in the age between 31 – 36 years were 12 (24%). few number of subjects 2 (4%) were in age between 37 – 40 years.

Section – B
Table – III: Frequency and Percentage Distribution of Mother and Father According to Level of Stress

(N = 100)

S. No	Level of Stress	Mothers Stress		Fathers Stress	
		Frequency	Percentage	Frequency	Percentage
1.	**Too Little Stress (18 – 36)**	0	0	0	0
2.	**Optimum Stress (37 – 54)**	22	44	25	50
3.	**Too Much Stress (55 – 72)**	28	56	25	50
4.	**Too Severe Stress (73 – 90)**	0	0	0	0

Table – III depicts the frequency and percentage distribution of mother and father according to level of stress.
Majority of the mothers 28 (56%) were experiencing too much stress. Subjects with optimum level of stress were 37 (54%).

Section – C
Table – IV: Frequency and Percentage Distribution of Mother and Father According to Level of Coping

(N = 100)

S. No	Level of Coping	Mothers Coping		Fathers Coping	
		Frequency	Percentage	Frequency	Percentage
1.	Maladaptive Coping (30 – 75)	4	8	8	16
2.	Adaptive Coping (76 – 150)	46	92	42	84

Table IV shows the frequency and percentage distribution of mother and father according to level of coping.

Mothers coping behaviour reveals an overwhelming majority of the subjects 46 (92%) were having adaptive coping. Similarly among fathers coping strategy shows 42 (84%) had adaptive coping behaviour. Few subjects among mothers 4 (8%) and among fathers 8 (16%) were with maladaptive coping behaviour.

qual number of fathers 25 (50%) were having optimum stress and too much level of stress.

Section – D
Table – V: Level of correlation between mothers stress and Mothers Coping Level

(N = 50)

S. No	Variables	Mean	Standard Deviation	Karl Pearson Correlation Coefficient	Type of Correlation
1.	Mothers Stress	53.98	7.150	0.113	Perfect Positive Correlation
2.	Mothers Coping	94.06	14.664		

Table – V shows the level of correlation between mothers stress and mothers coping behaviour. The mean stress score of mothers was 53.98 (SD $\leq$ 7.159)The mean coping behaviour score was 94.06 (SD $\leq$ 14.664). The estimated Karl Pearson Correlation Coefficient value was 0.113. it was interpreted there was a perfect positive correlation between mothers stress and mothers coping.

Table VI: Level of Correlation between Fathers stress and Fathers Coping Level

(N = 50)

S. No	Variables	Mean	Standard Deviation	Karl Pearson Correlation Coefficient	Type of Correlation
1.	Fathers Stress	54.12	7.336	-.218	Negative Correlation
2.	Fathers Coping	100.26	18.154		

Table – VI shows the level of correlation between fathers stress and mothers coping behaviour. The mean stress score of fathers was 54.12 (SD $\leq$ 7.336) The mean coping behaviour score was 100.26 (SD $\leq$ 18.154). The estimated Karl Pearson Correlation Coefficient value was -.218. it was interpreted there was negative correlation between mothers stress and mothers coping.**– G**

Table XII: Mean, Mean Difference, Standard Deviation and Independent't' test values of subjects (Stress)

(n = 50)

S. No	Variable	Mean	Mean Difference	Standard Deviation	Independent 't' test	'P' Value
1.	Mothers Stress	53.98		7.150		0.923
			0.14		-.097	
2.	Fathers Stress	54.12		7.336	(df = 98)	

The above table shows the Mean, Mean Difference, Standard Deviation and Independent't' test values of subjects (Stress)

To test the difference between level of stress among mother's and father's the null hypothesis can be stated as follows.

H0 – The level of stress among mother's and father's will be significantly differs.

Mean stress score for mother's were 53.98 (SD $\geq$ 7.150) and in father's stress score was 54.12 (SD $\geq$7.336) the mean difference of stress score was 0.14. Independent 't' test score -.097 (df = 98) the 'P' value was 0.923. This 'P' value was greater than 0.05. Hence the null hypothesis was accepted.

Table XIII: Mean, Mean Difference, Standard Deviation and Independent 't' test values of subjects (Coping)

(n = 50)

S. No	Variable	Mean	Mean Difference	Standard Deviation	Independent 't' test	'P' Value
1.	Mothers Coping	94.06		14.664		0.063
			6.2		-1.879	
2.	Fathers	100.26		18.154	(df = 98)	

The above table shows the Mean, Mean Difference, Standard Deviation and Independent't' test values of subjects (Coping)

To test the difference between level of coping behaviour el of stress among mother's and father's the null hypothesis can be stated as follows.

H0 – The level of coping among mother's and father's will be significantly differs.

Mean coping score for mother's were 94.06 (SD $\geq$ 14.664) and in father's coping score was 100.26 (SD $\geq$18.154) the mean difference of stress score was 6.2. Independent 't' test score – 1.879 (df = 98) the 'P' value was 0.063. This 'P' value was greater than 0.05. Hence the null hypothesis was accepted.

DISCUSSION

This chapter discusses the study findings by comparing with the results of the previous studies which had been done in the past. The main aim of the current study was to compare the stress level and coping strategies of expectant fathers and expectant mothers, attending antenatal clinic in selected hospital of Panipat, Haryana.

In the present study the researcher used quantitative research design and comparative research design was adopted. Settings of the study were antenatal clinic in civil hospital Panipat. Haryana.Population of the study were expectant fathers and mothers. Sample size of the study

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were 50 antenatal fathers and 50 antenatal mothers. Purposive sampling technique was used for collecting samples. Data collection tool was Parental Stress Scale and Coping Strategies Questionnaires were used. Data collection method was Interview method. The collected data were analysed with the help of descriptive and inferential statistics. The findings of the present studies were discussed in this chapter according to the objectives of the study under various sections.

Section – I: Findings of the study according to the frequency and percentage distribution of subjects according to demographic variables.
In the present study demographic characteristics of the mothers were distributed as follows.
With regard to the age, majority of the subjects 27 (54%) were in the age group between 22 – 25 years. Educational status of the mother shows that majority of the subjects 20 (40%) had primary education. Occupational status of the subjects reveals equal number of subjects 17 (34%) were unemployed and self – employed respectively.Religion of the subjects shows that majority 29 (58%) were Hindus.

In the present study demographic characteristics of the fathers were distributed as follows.
Age o the subjects reveals, majority of the subjects 21 (42%) were in age between 26 – 30 years. With regard to educational status of the subjects one half of the subjects 25 (50%) were had diploma / graduate qualifications.Occupational status of the subjects shows that majority of the subjects 28 (56%) were self – employed.Religion of the subjects shows that majority 29 (58%) were Hindus.

The first objective of the study was to assess the stress level among expectant fathers and expectant mothers.
In the current study, table – III shows the level of stress among expectant mothers.
Majority of the mothers 28 (56%) were experiencing too much stress. Subjects with optimum level of stress were 37 (54%).

The second objective of the study was to assess the stress level among expectant fathers and expectant mothers, table III shows the stress level of among expectant fathers
In the present study, equal number of fathers 25 (50%) were having optimum stress and too much level of stress.
Table XII shows the expected mothers mean stress score was 53.98 and the SD $\leq$7.150).
Table XIII shows the expected fathers stress mean score was 54.12 and the SD $\leq$7.336)

The third objective of the present study was to compare the stress level between expectant father and expectant mothers, table – IV depicts the coping level of expectant mother and mothers.
Mothers coping behaviour reveals an overwhelming majority of the subjects 46 (92%) were having adaptive coping. Similarly among fathers coping strategy shows 42 (84%) had adaptive coping behaviour.
Table XIII shows the Mean coping score for mother's were 94.06 and SD $\leq$ 14.664 and in father's coping score was 100.26 and SD $\leq$18.154.

The fifth objective of the study was to determine the association between stress level and socio demographic variables of expectant fathers and expectant mothers.Table V: and Table VI: shows the level of association between expected mothers and expected fathers stress and selected socio – demographic variables.

From table – v it was interpreted, there was no statistically significant association between expectant mothers stress and selected socio-demographic variables.

From table – vi it was interpreted, there was no statistically significant association between expectant fathers stress and selected socio-demographic variables.

The Sixth objective of the study was to determine the association between coping level and socio-demographic variables of expectant mothers and fathers. Table VII: and Table

VIII: shows the level of association between expectant mother and expectant fathers coping level and selected socio-demographic variables.

From table – vii, it was interpreted, there was no statistically significant association between expectant mothers coping and selected socio-demographic variables.

From table – viii, it was interpreted, there was no statistically significant association between expectant fathers coping and selected socio-demographic variables.

Table XII shows the compares in level of stress between expected mother and expected fathers.

Mean stress score for mother's were 53.98 (SD $\geq$ 7.150) and in father's stress score was 54.12 (SD $\geq$ 7.336) the mean difference of stress score was 0.14. Independent 't' test score -.097 (df = 98) the 'P' value was 0.923. This 'P' value was greater than 0.05. Hence the null hypothesis was accepted.

The above findings show that there was no significant difference between stress among expected mother and expectant fathers.

Table XIII shows the compares in level of coping between expected mother and expected fathers.

Mean coping score for mother's were 53.98 (SD $\geq$ 7.150) and in father's mean coping score was 54.12 (SD $\geq$ 7.336) the mean difference of coping score was 0.14. Independent 't' test score -.097 (df = 98) the 'P' value was 0.923. This 'P' value was greater than 0.05. Hence the null hypothesis was accepted.

The above findings show that there was no significant difference between coping levels among expected mother and expectant fathers.

SUMMARY, IMPLICATIONS, RECOMMENDATIONS AND CONCLUSION
SUMMARY

The current study aimed to compare the stress level and coping strategies of expectant fathers and expectant mothers, attending antenatal clinic. The researcher got approval from the ethical committee of Ved Nursing College before starting the study. Research methodology in this study was comparative design. Settings of the study was civil hospital Panipat, data were collected among expectant fathers and mothers who were visiting antenatal clinic during the data collection period. Sample size for the study was 50 expectant fathers and 50 expectant mothers. Sampling technique for the study was purposive sampling technique. Research tool for the study

consist of three sections, first sections consists of demographic variables, second section consists of parental stress scale and third section includes coping strategies questionnaire. Data collection method was interview method. Separate interview were taken for expectant fathers and expectant mothers. Collected data was coded and analysed by using descriptive and inferential statistics.

CONCLUSIONS

In this study it was found that expectant mothers have less stress when comparing to the stress level of expectant fathers. The coping strategies used by mothers seem to be better than expectant fathers. This was due to the fact mothers sees the delivery as gift of life so they have less stress. Fathers feel stressful because they have more responsibilities in family and in outside families. The mothers relationship between stress and coping was positive, but for fathers there was a negative relationship.

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