



# **A DESCRIPTIVE STUDY TO ASSESS THE LEVEL OF KNOWLEDGE REGARDING THE CHANGES IN EXPRESSION OF ANGIOPOIETINS IN THE CORPUS LUTEUM IN EARLY PREGNANCY INVEIW TO DEVELOP AND CIRCULATE HELP ME GUIDE AMONG U.G STUDENT IN SELECTED COLLEGE OF NURSING AT KANPUR.**

Osheen<sup>2</sup>, Mrs Jasmi Manu<sup>1</sup>

2<sup>nd</sup> year M.Sc. Nursing Student Faculty of Nursing, Rama University, Kanpur Uttar Pradesh

HOD of obstetrics and gynaecologic Rama University, Kanpur Uttar Pradesh

## **Abstract**

Angiopietins govern vasculature stabilisation, which seems required for ovulation angiogenesis. The corpus luteum is a site of angiogenesis, which is the construction of a thick capillary network that permits hormone-producing cells to access the oxygen, nutrients, and hormone precursors they need to make & release considerable amounts of progesterone needed for early pregnancy. After diversification, cellular membranes usually stay active for 2–3 years, but in the CL, a non-fertile cycle produces structural luteolysis, causing these newly generated blood vessels to regress in a matter of days. The present study aimed to assess the knowledge regarding the changes in expression of angiopietins in the corpus luteum in early pregnancy inveiw to develop and circulate help me guide among U.G. student. The objectives of the study were to assess the level of knowledge regarding the changes in expression of angiopietins in the corpus luteum in early pregnancy inveiw to develop and circulate help me guide among U.G student & to find the association between the knowledge score with the demographic variables. The research approach used was simple cross-sectional survey & simple descriptive design was adopted for this study. The setting of the study was Rama college of nursing Kanpur Uttar Pradesh & the sample size was 104 U.G. students selected by convenient sample technique. The data was collected & analysed on the basis of objectives. The finding of the study showed that mean value 10.29, standard deviation value 4.94 & the majority 33.65% of U.G. students have inadequate knowledge & 40.38% U.G. students have moderate knowledge & 25.96% U.G. students have adequate knowledge. The association between the knowledge on the changes in expression of angiopietins in the corpus luteum in early pregnancy inveiw to develop and circulate help me guide among U.G. students were assessed with there demographic variables. It showed that gender & any previous knowledge, if yes source of information was the significant level of knowledge except the age in year, place of stay, educational status, type of family, dietary habits, religion. It concluded that the majority of U.G. students have moderate level of knowledge on the changes in

expression of angiopoietins in the corpus luteum in early pregnancy in view to develop and circulate help me guide among U.G. students in selected college of nursing.

**Keywords:** Angiopoietins, corpus luteum, early pregnancy, help me guide, U.G. students

## INTRODUCTION

In early being pregnant, the epithelium affords a tube community for growing embryo earlier than placentation. Decidualization of the lady internal reproductive organ mucous membrane consists of dramatic differentiation of uterine tissue, together with morphological & beneficial transformations.<sup>1</sup> However, all through this technique, a lack of assets in the decidua finally ends up in early abortion and toxemia of being pregnant through organic technique deficiency. It is trustworthy to say that the woman inner reproductive organ wishes lush vascularity within the decidua to prevent being pregnant failure. Mucous membrane formation resulting from decidualization is termed 'decidual angiogenesis', and includes the fantastic improvement of uterine Neovascularization; which has angiogenesis, vasculogenesis, arteriogenesis - and vascular reworking stirred through manner of manner of steroid hormones.<sup>2</sup> The steroid hormones loose from the ovaries stimulate tube reworking and female internal reproductive organ neovascularization, which may be essential for no-hit gestation.<sup>3</sup> Lipo-Lutin and steroid are representative hormones which bind to progesterone receptor (PR) & estrogen receptor (ER), respectively, & art work to control epithelium formation all through early being pregnant progesterone promotes decidual increase all through this period through the vascular epithelium increase factor-A/vascular endothelial increase factor receptor-2 (VEGF-A/VEGFR-2) system. Angiopoietin is part of a very own family of vascular boom factors that play a characteristic in embryonic & postnatal angiogenesis.<sup>4</sup> Angiopoietin signaling most right now corresponds with angiogenesis, the way with the useful resource of the use of which new arteries and veins form from pre-contemporary blood vessels.<sup>5</sup> Angiogenesis proceeds through sprouting, endothelial mobileular migration, proliferation, & vessel destabilization or stabilization. They are answerable for assembling & disassembling endothelial lining of blood vessels. Angiopoietin cytokines are concerned with controlling microvascular permeability, vasodilation, and vasoconstriction with the useful resource of the use of signaling easy muscle cells surrounding vessels.<sup>6</sup>

### Problem of the statement

A descriptive study to assess the level of knowledge regarding the changes in expression of angiopoietins in the corpus luteum in early pregnancy in view to develop and circulate help me guide among U.G student in selected college of nursing at Kanpur.

### Objectives of the study

- To assess the level of knowledge regarding the changes in expression of angiopoietins in the corpus luteum in early pregnancy in view to develop and circulate help me guide among U.G student in selected college of nursing at Kanpur.
- To find the association between the knowledge score with the demographic variables.

### Hypothesis

**H0-** There is no significant association between the demographic variables and knowledge score of U.G. student regarding changes in expression of angiopoietins in the corpus luteum in early pregnancy.

**H1-** There is a significant level of knowledge of U.G student regarding changes in expression of angiopoietins in the corpus luteum in early pregnancy.

## Methodology

**Research approach-** In this study Simple cross-sectional survey approach was used

**Research design-** In this study Simple descriptive design was adopted for this study

## Variables

**Research variables-** knowledge on the changes in expression of angiopoietins in the corpus luteum in early pregnancy in view to develop and circulate help me guide among U.G student

**Demographic variables-** In this study the demographic variable was age, religion, education, occupation, family, socio-economic status etc.

**Extraneous variables-** Mass media education, peer group discussion.

## Population

In this study the population consist of all U.G students studying in selected nursing college at Kanpur

**Targeted population-** It comprised of U.G students.

**Accessible population-** It comprised of U.G students at selected nursing college.

**Sample technique-** During this study the sample were selected through Convenient sample technique

**Sample size-** The sample size of present study comprises of 104 U.G student who fulfilled the inclusion criteria.

## Sample criteria

**Inclusion criteria-** U.G student who are studying in the nursing college

- Student who are willing to participate

**Exclusion criteria-** U.G student who are not available during data collection.

## Method of data collection

Data collection was done within one week in selected college of Nursing Kanpur Uttar Pradesh. 104 sample was collected who fulfilled the inclusion criteria of the study before data collection oral consent was taken from participants. Data was analysed according to the objective of the study by descriptive and inferential statistics.

## Development of tool

**Construction-** The tool was constructed after reviewing literature and in consultation with concept.

**Description and scoring-** The tool consist of two sections

**Section A-** It deal with demographic data such as age, education, religion, socio economic status etc.

**Section B-** It consist of self-structured questionnaire to assess the changes in expression of angiopoietins in the corpus luteum in early pregnancy.

It consists of 20 multiple choice questions. Each question contains 1 score for given right answer.

**Result findings****Section-A****Table 1. Frequency and percentage wise description of demographic variables of U.G. Students. n=104**

<b>Demographic variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>		
Male	5	4.8%
Female	99	95.2%
<b>Age in years</b>		
17-18	4	3.8%
19-20	21	20.2%
21-22	67	64.4%
Above 22	12	11.5%
<b>Place of stay</b>		
Hostel	48	46.2%
As a paying guest	12	11.5%
Home	44	42.3%
<b>Educational status</b>		
B.Sc. Nursing 3 <sup>rd</sup> year	36	34.6%
B.Sc. Nursing 4 <sup>th</sup> year	68	65.4%
<b>Type of family</b>		
Joint family	51	49%
Nuclear family	53	51%
<b>Any previous knowledge, if yes source of information</b>		
Mass media		
Health worker	31	29.8%
Textbooks	15	14.4%
	58	55.8%
<b>Dietary Habits</b>		
Vegetarian	70	67.3%
Non vegetarian	22	21.2%
Ovo vegetarian	12	11.5%
<b>Religion</b>		
Hindu	91	87.5%
Christian	2	1.9%
Muslim	11	10.6%

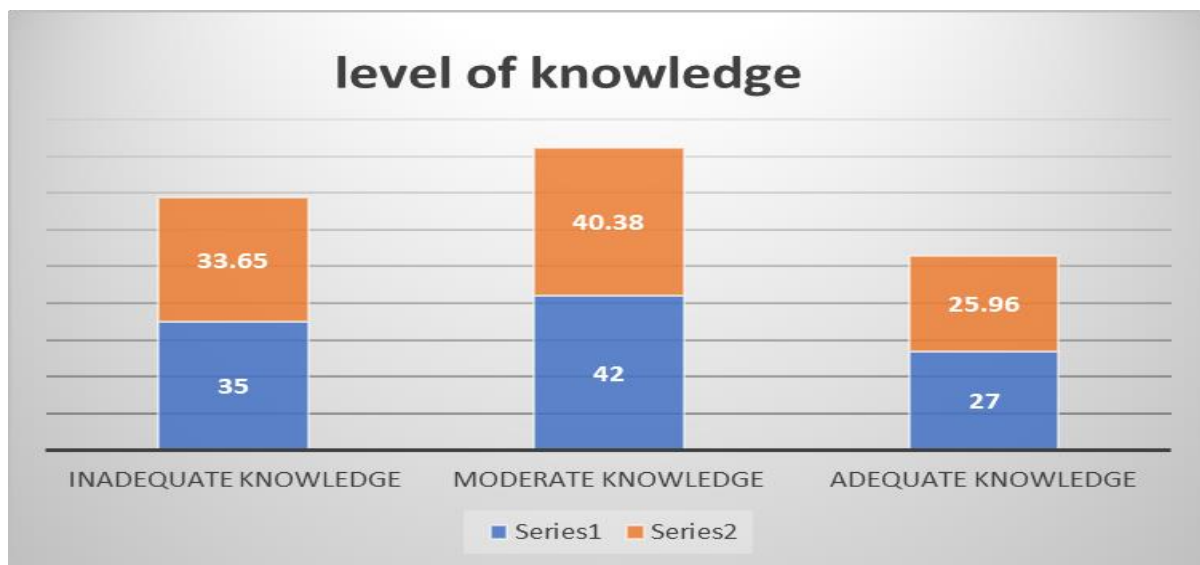
(Above Table No.1) Shows percentage wise distribution of U.G. student according to their gender. The data represents that 5 (4.8%) are male and 99 (95.2%) are female. Shows percentage wise distribution of age. The data represents that 4(3.8%) are in 17-18 years, 21 (20.2%) are in 19-20 years, 67 (64.4%) are in 21-22 years and 12 (11.5%) are above 22 years age group. Shows percentage wise distribution of place of stay. The data represents that 48 (46.2%) stay in hostel, 12 (11.5%) are stay in P.G. and 44 (42.3%) live in home. Shows percentage wise distribution of type of family. The data represents that 51 (49%) live in joint family and 53 (51%) live in nuclear family. Shows percentage wise distribution of previous knowledge. The data represents that 31 (29.8%) knowledge by mass media, 15 (14.4%) have knowledge by health works and 58 (55.8%) have knowledge by textbooks. Shows percentage wise distribution of Dietary habits. The data represents that 70 (67.3%) are vegetarian, 22 (21.2%) are non- vegetarian and 12 (11.5%) are Ovo vegetarian. Shows percentage wise distribution of religion. The data represents that 91 (87.5%) are Hindu, 2 (1.9%) are Christian and 11 (10.6%) are Muslim.

## Section-B

**Table 2. Frequency and percentage wise description of the level of knowledge on changes in expression of angiotensins in the corpus luteum in early pregnancy.**

n= 104

Knowledge score	Frequency	Percentage
Inadequate knowledge	35	33.65%
Moderate knowledge	42	40.38%
Adequate knowledge	27	25.96%

**FIG-1: Column diagram showing level of knowledge of U.G. students.**

(Above table no-2, fig no-1) column diagram shows that out of 104 U.G. students, 35 (33.65%) had inadequate knowledge, 42 (40.38%) had moderate knowledge and 27 (25.96%) had adequate knowledge.

**Table 3. Mean and Standard deviation of knowledge scores on changes in expression of angiotensins in the corpus luteum in early pregnancy among U.G. students.**

Mean	Standard Deviation
10.29	4.94

(Above table no-3) shows mean value is 10.29 and standard deviation value 4.94 of level of knowledge on changes in expression of angiotensins in the corpus luteum in early pregnancy among U.G. students.

## Section-E

## Association Between the level of knowledge score with the selected demographic variables of U.G. students

Table 4. Association of the knowledge level of U.G. students with their demographic variables

n=104

Demographic variables	Knowledge level			DF	Chi square X <sup>2</sup>	Table value 0.05	Inferences
	IA	MA	A				
<b>Gender</b>							
Male	1	0	4	02	12.71	5.99	Significant
Female	29	30	40				
<b>Age in years</b>				06	0.75	12.59	Non Significant
17-18	2	2	0				
19-20	10	6	5				
21-22	21	31	17				
Above 22	7	1	4				
<b>Place of stay</b>				06	10.92	12.59	Non Significant
Hostel	18	25	5				
As a paying guest	7	5	0				
Home	20	10	14				
<b>Educational status</b>				02	0.08	5.99	Non Significant
B.Sc. Nursing 3 <sup>rd</sup> year	16	14	8				
B.Sc. Nursing 4 <sup>th</sup> year	20	30	18				
<b>Type of family</b>				02	0.04	5.99	Non Significant
Joint family	14	30	7				
Nuclear family	9	32	12				
<b>Any previous knowledge, if yes source of information</b>				02	26.67	5.99	Significant
Mass media	10	18	3				
Health worker	1	10	4				
Textbooks	25	15	18				
<b>Dietary Habits</b>				02	1.5	5.99	Non Significant
Vegetarian	14	30	26				
Non vegetarian	5	10	7				
Ovo vegetarian	3	8	1				
<b>Religion</b>				02	6.37	5.99	Significant
Hindu	35	38	18				
Christian	0	0	2				
Muslim	6	3	2				

The above table showed that association between the knowledge regarding the changes in expression of angiotensin in the corpus luteum in early pregnancy among U.G student with their selected demographic variables. Genders, previous knowledge, and source of information & religion is the significant level of knowledge except the age in years, Place of stay, educational status, occupation, Dietary Habits, Type of family, Hence H1 hypothesis was accepted.

**DISCUSSION-** The study aimed to assess the knowledge regarding the changes in expression of angiopoietins in the corpus luteum in early pregnancy in view to develop and circulate help me guide among U.G student in selected college of nursing at Kanpur. The findings were discussed in relation to the objectives of the study. The purpose of the study to assess the knowledge regarding the changes in expression of angiopoietins in the corpus luteum in early pregnancy among U.G students. The overall knowledge scores regarding the knowledge on the changes in expression of angiopoietins in the corpus luteum in early pregnancy among U.G students showed that 35 (33.65%) had inadequate knowledge, 42 (40.38%) had moderate knowledge and 27 (25.96%) had adequate knowledge. The mean value was 10.29 and standard deviation value 4.94.

All demographic variables were not significant at 0.05 levels except Genders, previous knowledge, and source of information & religion which is significant at 0.05 level. Thus, it can be inferred that there is significant association between knowledge levels of U.G students' knowledge regarding the changes in expression of angiopoietins in the corpus luteum in early pregnancy in view to develop and circulate help me guide and demographic variables. Therefore, the hypothesis stated there will be significant association between the knowledge level of U.G students' knowledge regarding the changes in expression of angiopoietins in the corpus luteum in early pregnancy and selected demographic variables is accepted.

### RECOMMENDATION-

The recommendation is made on the basis of present study are

- The study can be done by using other methods of data collection.
- The similar can be done on large sample size
- The study can be repeated in community area.

**CONCLUSION-** The study was aimed to assess the knowledge on regarding the changes in expression of angiopoietins in the corpus luteum in early pregnancy in view to develop and circulate help me guide among U.G student in Rama college of nursing at Kanpur Uttar Pradesh. The sample size was 104 U.G students selected by convenient sampling technique. The knowledge scores regarding the knowledge on the changes in expression of angiopoietins in the corpus luteum in early pregnancy among U.G students. The overall knowledge scores regarding the knowledge on the changes in expression of angiopoietins in the corpus luteum in early pregnancy among U.G students showed that 35 (33.65%) had inadequate knowledge, 42 (40.38%) had moderate knowledge and 27 (25.96%) had adequate knowledge. The mean value was 10.29 and standard deviation value 4.94 and the association between level of knowledge on the changes in expression of angiopoietins in the corpus luteum in early pregnancy among U.G students with their selected demographic variables Genders, previous knowledge, and source of information & religion except the age in years, Place of stay, educational status, occupation, Dietary Habits, Type of family.

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