



## Comparison of knowledge on Infertility among infertile couples

**Mittal Panchal**

M.Sc. nursing student, Obstetric & Gynaecological nursing, Sumandeep nursing College/ , Sumandeep Vidyapeeth, Piparia, Vadodara-391760, Gujarat, India,

**Rita Thapa**

Associat Professor Sumandeep Nursing College, Sumandeep Vidyapeeth, Piparia, Vadodara-391760, Gujarat, India

**ABSTRACT**

Background: "The best thing in life is free unless you have Infertility" Infertility is a disease that results in the abnormal functioning of the male or female reproductive system. It is a problem of global proportions, affecting on an average 8-12% of couples worldwide. Aims and objectives: The aim of the study is to assess the level of knowledge on infertility among infertile couples of rural and urban community and make comparison of knowledge between them. Material and method: The research design is non experimental descriptive comparative design. The research approach is a Quantitative approach with a view to assess the level of knowledge by pre-test on infertility among infertile couples. In the present study 80 infertile couples (40 from rural and 40 from urban) selected using Non-probability convenience sampling technique. Results: Mean percentage of 50.8% was obtained in the "rural area" with mean and SD of 17.28 ± 3.4 and mean percentage of 61.8% was obtained in the "urban area" with mean and SD of 21.00 ± 3.1. The 't' Test value was 5.12\* (Significant at 5% level). Conclusion: In present study, assess the level of knowledge on infertility among infertile couples of selected rural and urban community and made comparison on level of knowledge, that the urban infertile couples have more knowledge on infertility as compare with rural infertile couples. So the hypothesis (RH1) is accepted and research hypothesis (RH2) is partially accepted.

**KEYWORDS**

Comparative, Knowledge, Infertility, Infertile couple and Selected rural and urban community

**INTRODUCTION**

Infertility define as, it is the inability of a couple to conceive after 1 year of regular intercourse without using contraception. Infertility is a crisis of the deepest kind. It threatens many aspects of a couple's life not only the partners relationship to each other, but it also effects them individually and their relationship with friends and family.

Infertility can be treatable with so many treatments. Treatments are increasing sperm count and motility, reducing the presence of infection, hormone therapy, surgery and assisted reproductive techniques like artificial insemination, trans vaginal fertilization, zygote intra fallopian transfer (ZIFT), gamete intra fallopian tube transfer (GIFT), in vitro fertilization and embryo transfer and in vitro fertilization / embryo transfer or test tube conception.

**NEED OF THE STUDY**

According to WHO, between 2 and 10% of couples worldwide are unable to conceive a child and a further of 10-25% experience secondary Infertility i.e. is unable to conceive a second or subsequent child. WHO believes that around 60-80 million couples in the world are infertile.

Research by the World Health Organization (WHO) estimated that in 2012, 48.5 million couples worldwide were unable to have a child. They found that 1.9 percent of women aged 20-44 years who wanted a child were unable to have their first live birth and 10.5 percent of women who had previously given birth were unable to have another baby after five years of trying. From current world population, 72.4 million women are currently infertile and 20 million infertile couples in the India.

During the clinical experiences the researchers found that the rural infertile couples are having less knowledge and no knowledge about newer treatment of infertility. So this study

is planning to assess the level of knowledge on infertility among infertile couples of rural community and urban community. And then compare the knowledge in between. It can be improve the level of knowledge in infertility among all selected infertile couples and they can get further treatment for their problems. This study is conducted to assess the level of knowledge on infertility and to improve the knowledge by administer the information booklet and aware them about various treatments (ART) of infertility.

**STATEMENT OF THE PROBLEM**

"A comparative study to assess the level of knowledge on infertility among infertile couples of selected rural and urban community of Vadodara district, Gujarat state"

**OBJECTIVES**

1. To assess the level of knowledge on infertility among infertile couples who are residing in rural and urban community.
2. To compare the knowledge on infertility among infertile couples of selected rural and urban community.
3. To determine the association between the level of knowledge on infertility among infertile couples in rural and urban community with their selected demographic variables.
4. To prepare and administer information booklet on infertility.

**HYPOTHESIS**

**H1:** There will be significant difference in the knowledge regarding infertility among infertile couples of urban and rural community.

**H2:** There will be significant association in the knowledge regarding infertility among infertile couples of urban and rural community with their selected demographic variables.

**RESEARCH METHODOLOGY**

**Research approach:** A Quantitative approach

**Research Design:** Non - experimental descriptive comparative research design

**Variable**

**Dependent variable:** - Knowledge of infertile couples

**Demographic variables:** - Demographic variables in this study are age, educational status, religion, type of family, family income, knowledge about infertility, source of information and treatment option.

**Setting of the study**

Setting of this study is selected **rural and urban community** of Vadodara district, Gujarat state.

**Population:** Infertile couples

**Sample:** Infertile couples of selected urban and rural community of Vadodara district

**Sampling technique:** A non probability convenience sampling technique

Tool development

**SELECTION OF TOOL**

This consists of 2 parts:-

**Part 1**

Demographic variables consists of **7 items** are age, educational status, religion, type of family, family income, knowledge about infertility, source of information and treatment option.

**Part 2**

**Self structured questionnaire** method was used to assess the level of knowledge of infertile couples. It consists of **34 questions**.

**SCORING INTERPRETATION**

Total tool was 34, so divided in to the 34 marks as below.

Inadequate: - ≤ 50%

Moderate: - 51-75 %

Adequate: - > 75 %

**Content validity**

Prepared self structured questionnaire with objectives and criteria were given to 7 experts. 100% agreement was given by experts. The final tool was divided into section 'A' which consisted of 7 items and section 'B' which consisted of 34 items.

**Reliability**

Tool was tested for reliability on 8infertile couples of urban and rural area of Vadodara district. Split half method was used and reliability was calculated using Karl Person's co-relation, co-efficient. This showed that the tool was reliable.

The correlation was determined, the reliability was found to be significant that is: **0.899**.

**Process of Data Collection**

The data collection period was from 10-08-2015 to 29-08-2015. First ten days data was collected from rural area is, Waghodia. There after next ten days data was collected from urban area is, Kishanwadi. Only pretest is done from all the included infertile couples and then explained the booklet on infertility and given them.

**INCLUSION AND EXCLUSION CRITERIA**

**Inclusion Criteria**

- Primary infertile couples.
- Infertile couples who all are not taking ART treatment.
- Infertile couples having age between 20 – 40 years.

**Exclusion Criteria**

Infertile couples,

who had attended seminar on infertility.  
 who all are related to medical or health profession.  
 who do not know Gujarati and English.

**RESULTS**

Organization of study findings

**Section 1 – Demographic Characteristics** of infertile couples

**Section 2 – Overall and Aspect wise Assessment** of Pre test Knowledge Level on Infertility among infertile couples of Rural and Urban community

**Section 3 – Comparison** of the level of knowledge on infertility among infertile couples of Rural and Urban community

**Section 4 - Association** between Demographic variables and Knowledge level among infertile couples of Rural and Urban community.

**Table:1 Aspect wise Mean Knowledge scores among Rural and Urban infertile couples**

No.	Knowledge Aspects	Knowledge scores (%)				Independent 't' Test
		Rural (n=40)		Urban (n=40)		
		Mean	SD	Mean	SD	
I	Anatomy & Physiology of Reproduction	58.4	18.4	65.3	15.9	1.79
II	Knowledge about pregnancy	39.0	23.9	49.5	19.7	2.14
III	General aspects of fertility	36.9	23.3	58.1	26.2	3.82
IV	Causes of infertility	82.5	21.3	85.0	21.3	0.52
V	Knowledge about Diagnosis of Infertility	50.0	27.2	55.0	22.1	0.90
VI	Prevention of Infertility	41.7	21.0	51.7	32.0	1.65
VII	Treatment of infertility	49.4	18.3	65.3	13.4	4.43*
	Combined	50.8	10.1	61.8	9.1	5.12*

\* Significant at 5% level, NS: Non-significant  
 t (0.05, 78df) = 1.96

**Table:2 Overall Mean Knowledge scores among Rural and Urban infertile couples**

Group	Sample (n)	Max. Score	Knowledge scores				Independent 't' Test
			Mean	SD	Mean(%)	SD(%)	
Rural	40	34	17.28	3.4	50.8	10.1	5.12*
Urban	40	34	21.00	3.1	61.8	9.1	

\*Significant at 5% level, t (0.05, 78df) = 1.96

**:3 Classification of level of knowledge on Infertility among Rural and Urban infertile couples**

Knowledge Level	Category	Respondents				2 Value
		Rural		Urban		
		N	%	N	%	
Inadequate	≤ 50 % Score	22	55.5	7	17.5	12.17*
Moderate	51-75 % Score	18	45.0	33	82.5	
Adequate	> 75 % Score	0	0.0	0	0.0	
Total		40	100.0	40	100.0	

NS: Non-significant 2 (0.05, 1df) = 3.841

**DELIMITATION**

**The study is delimited to,**

1. middle urban community.
2. primary infertile couples.
3. age group between 20 – 40 years.
4. couples who all are diagnosed as primary infertility.

## DISCUSSION

Discussion based on the formulated objectives of the study and hypothesis. The study was designed to assess the level of knowledge on infertility among infertile couples of rural and urban community and make comparison between them, to find out more knowledge from rural and urban community.

## RECOMMENDATIONS

- The similar study can be conduct on a larger sample for each group. This would provide in valuable evidence in the area of practice.
- A comparative study can be conducted with control group.
- Further study could be carried out to assess the effectiveness of structure teaching programme by adopting purposive sampling of infertile couples.
- A similar study can be conducted on Final year B.Sc. Nursing and final year P.B.B.Sc. Nursing students to assess their knowledge on infertility.
- A similar study can be conducted on fertile couples also just to assess the level of knowledge from rural and urban community.
- A study can be done to assess the knowledge and practice of infertile couples regarding treatment and prevention of infertility.
- A longitudinal study can be done using post-test after one month, six month and one year to see the effectiveness of STP.

## ETHICAL STANDARDS

Ethical clearance was obtained from the ethical committee and willingness was obtained from the subject before data collection.

## CONCLUSION

In present study, assess the level of knowledge on infertility among infertile couples of selected rural and urban community and made comparison on level of knowledge, that the urban infertile couples have more knowledge on infertility as compare with rural infertile couples.

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