A Study to identify the reasons behind Infertility with reference to Erode

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ABSTRACT

Infertility is a common problem affecting one couple in six. It can be defined as the incapacity to fulfil pregnancy after reasonable time of sexual intercourse with no contraceptive measures taken. The evidence for changes in the prevalence of infertility is difficult to establish. This increase could be due to at least four factors: delayed childbearing, alterations in semen quality due to habits such as cigarette smoking and alcohol, changes in sexual behaviour and eliminations of most taboos.First, the introduction of assisted reproduction technologies has provided an opportunity to study basic reproductive processes. Second, societal changes have occurred such as the increase in the proportion of women over 35 years old seeking pregnancy. This fact is due to a later age for marriage and postponement of pregnancy. Third, the development of molecular biology and genetics has become very important for the study, diagnosis and assessment of couples, many of them considered until now as "unexplained infertile couples". There are many causes of infertility, including some that medical intervention can treat. The most common cause of female infertility is ovulatory problems which generally manifest themselves by sparse or absent menstrual periods. Women who are fertile experience a natural period of fertility before and during ovulation, and they are naturally infertile for the rest of the menstrual cycle. Fertility awareness methods are used to discern when these changes occur by tracking changes in cervical mucus or basal body temperature.

I. INTRODUCTION

"Infertility is the inability of a person, animal or plant to reproduce by natural means. An infertile person, animal or plant cannot have babies, produce young or produce new plants" In humans, infertility is the inability to become pregnant or carry a pregnancy. There are many causes of infertility, including some that medical intervention can treat. The most common cause of female infertility is ovulatory problems which generally manifest themselves by sparse or absent menstrual periods. Women who are fertile experience a natural period of fertility before and during ovulation, and they are naturally infertile for the rest of the menstrual cycle. Fertility awareness methods are used to discern when these changes occur by tracking changes in cervical mucus or basal body temperature.

II. Female infertility

The following causes of infertility may only be found in females. For a woman to conceive, certain things have to happen: vaginal intercourse must take place around the time when an egg is released from her ovary; the system that produces eggs has to be working at optimum levels; and her hormones must be balanced. For women, problems with fertilization arise mainly from either structural problems in the Fallopian tube or uterus or problems releasing eggs. Infertility may be caused by blockage of the Fallopian tube due to malformations, infections such as chlamydia and/or scar tissue. For example, endometriosis can cause infertility with the growth of endometrial tissue in the Fallopian tubes and/or around the ovaries. Endometriosis is usually more common in women in their mid-twenties and older, especially when postponed childbirth has taken place.Another major

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cause of infertility in women may be the inability to ovulate. Malformation of the eggs themselves may complicate conception. For example, polycystic ovarian syndrome is when the eggs only partially developed within the ovary and there is an excess of male hormones. Some women are infertile because their ovaries do not mature and release eggs. In this case synthetic FSH by injection or Clomid (Clomiphene citrate) via a pill can be given to stimulate follicles to mature in the ovaries

III. Male infertility

The main cause of male infertility is low semen quality. In men who have the necessary reproductive organs to procreate, infertility can be caused by low sperm count due to endocrine problems, drugs, radiation, or infection. There may be testicular malformations, hormone imbalance, or blockage of the man's duct system.

IV.OBJECTIVES OF THE STUDY

- To ascertain the cause of infertility.

V. SCOPE OF THE STUDY

The researcher attempts to create an awareness to the people of Erode on infertility and also the study shall help to reduce the infertility rates in the future and help the people of Erode in their health.

VI.LIMITATIONS OF THE STUDY

- A Study that all felt as a more controversial one, so at first all of them neglected on approving it.
- As Doctors are my respondents, so it is tough for us to contact them in their busy schedule.

VII.REVIEW OF LITERATURE
'Male infertility ratio on the rise in Erode, Tirupur, Coimbatore'

November 01, 2011

Pesticides, dyeing units and other environment factors are the reasons. Childless couples should consult a fertility centre at the earliest as state-of-the-art technology is now available for best results, M.S. Lakshmi, Head of IVF Department, Sri Ramakrishna Centre for Women, Sri Ramakrishna Hospital said, here on Monday. She told reporters that, of late, more couples were becoming vulnerable to infertility as rapid growth of industrialisation, change in lifestyle patterns and radiations from electronic gadgets, were affecting fertility. She added that the new In Vitro Fertilisation (IVF)

Department inaugurated at the hospital had state-of-the-art equipment and advanced treatment could be provided at affordable cost without compromising on quality.

Ms. Lakshmi said that the male infertility ratio was on the rise, particularly in cities such as Erode, Tirupur and Coimbatore, as pesticides, dyeing units and other environment factors were affecting the population the most. She said that IVF was a process by which eggs and sperms were fertilized in a laboratory in a controlled environment and the embryo was transferred into the womb.

A new technique, Intra Cytoplasmic Sperm Injection (ICSI) for men was a process where a matured sperm was directly injected into the egg and this expensive process needed to be repeated many times. C. Soundara Raj, managing trustee, S.N.R. Sons Charitable Trust, said that advanced technology helped them provide quality treatment at low cost and the health of the newborn was continuously monitored.

V. Anil Kumar, dean of the hospital, V. Ramakrishnan, trustee, and C.V. Ram Kumar, chief executive officer of the trust, were present. Kamala Selvaraj, associate director, G.G. Hospital, Chennai, inaugurated the IVF Department.

VIII.RESEARCH METHODOLOGY

RESEARCH DESIGN
- A Master plan that specifies the method and procedures for collecting and analyzing needed information.
- A research design is a framework or blueprint for conducting the marketing research project.

DESCRIPTIVE RESEARCH:
Descriptive research is used to describe characteristics of a population or phenomenon being studied. it involves the description, recording, analysis, and interpretation of the present nature, composition or processes of phenomena.

- It is a fact finding investigation with adequate Interpretation.
- It focuses on particular aspects or dimensions of the Problem studied.

SAMPLE DESIGN
Sampling is the process of selecting a sufficient number of element from the population.

CLUSTER SAMPLING:
Cluster sampling refers to a type of sampling method. With cluster sampling, the researcher divides the population into separate groups, called **clusters**. Then, a simple random sample of clusters is selected from the population.

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The researcher conducts the analysis on data from the sampled clusters.

DATA COLLECTION METHOD

PRIMARY DATA

These are data which are collected for the first time directly by the Researcher for the Specific study undertaken. In this research primary data are collected directly from the Respondent by using Questionnaire.

SECONDARY DATA

These are data which are already collected and used by someone previously. In this research review of Literature, Details of the industry are collected from the Internet.

SAMPLING SIZE AND TECHNIQUE

SIZE OF THE SAMPLE

- The researcher by using cluster sample choose15 doctors as respondents to contribute to the study and leave the sample size as 15.

SIMPLE PERCENTAGE

The percentage method is used for comparing certain feature.

The collected data represented in the from of tables and graphs in order to give effective visualization of comparison made.

$$\text{Simple Percentage} = \frac{\text{No of respondents}}{\text{Total No of Respondents}} \times 100$$

HENRY GARRETT RANKING

Garrett's ranking technique to find out the most significant factor which influences the respondent, Garrett's ranking technique was used. As per this method, respondents have been asked to assign the rank for all factors and the outcomes of such ranking have been converted into score value with the help of the following formula:

Percent position = 100 (Rij – 0.5) Nj

Where Rij = Rank given for the ith variable by jth respondents

Nj= Number of variable ranked by jth respondents.

IX.DATA ANALYSIS

GENDER GROUP OF THE RESPONDENTS

TABLE NO:1

GENDER GROUP	NO.OF RESPONDENTS	PERCENTAGE
Male	3	20%
Female	12	80%
Total	15	100

INTERPRETATION 1

From the above table,20% of respondents are Male,80% of respondents are female.

RANK THE FACTORS INFLUENCING INFERTILITY

TABLE NO:2

S.NO	FACTORS	MEAN SCORE	TOTAL	RANK
1	SPERM COUNT	64	768	1
2	BEING OVERWEIGHT OR UNUSUALLY THIN	91	637	6
3	LATE MARRIAGE	68	748	2
4	POSTPONING BABIES	117	468	9
5	FOOD HABITS	121	363	10
6	THYROID PROBLEM	95	570	7
7	MENTAL STRESS	85	680	3
8	CHAIN SMOKING OR ALCOHOL USE	98	490	8
9	HIGH CAFFEINE	162	162	12
10	HORMONOL IMBALANCE	73	657	4

11	MENSTRUAL IRREGULARITIES	73	657	4
12	ENVIRONMENTAL POLLUTION	123	246	11

X.SUGGESTIONS:

- A healthful diet(like zinc contained foods),exercise, stop smoking and drinking alcohol may help to increase the sperm count and enhance infertility.
- Late marriage should be avoided and it is advised to get married below 25years for women.
- Meditation and peaceful lifestyle may enhance the infertility.

INTERPRETATION 2

From the above table it is evident that "sperm count" ranked as no.1 with a total score of 768,"Late marriage" is ranked as no.2 with a total score of 748, "Mental stress" is ranked as no.3 with a total score of 680, "Menstrual irregularities" is ranked as no.4 with a total score of 657, "Hormonal imbalance" is ranked also no.4 with a total score of 657 "Being overweight or unusually thin" is ranked as no.6 with a total score of 637, "Thyroid problem" is ranked as no.7 with a total score of 570,"Chain smoking or alcohol use" is ranked as no.8 with a total score of 490,"Postponing babies" is ranked as no.9 with a total score of 468,"Food habits" is ranked as no.10 with a total score of 363,"Environmental pollution" is ranked as no.11 with a total score of 246,"High caffeine" is ranked as no.12 with a total score of 162.

XI.CONCLUSION

Overall this study may helpful to aware about infertility and to know about the causes of infertility. Most of the infertility patients were labourers, machine operators and industry workers who work in unhealthy conditions. Among the women, the use of polluted water and pesticide-laden vegetables and fruits bring in early puberty. This, coupled with late marriage, affects their fecundity, the doctors point out. Childless couples should consult a fertility centre at the earliest state. They shouldn't lose hope. There is always a way out of difficult situations, we should not stop trying.

XII.REFERENCES

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