

Assessment of Knowledge and Attitude Towards Artificial Reproductive Technology (Art) Among Women Attending Selected Infertility Clinic of Mangalore



Medical Science

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ABSTRACT

Parenthood is a fundamental human need. Pregnancy is a profound experience that is unique amongst couples in which the outcome and their ability to manage the pregnancy are often unpredictable.¹ For many women suffering from infertility; ART is often viewed as a viable alternative. The aim of the study was to assess the knowledge and attitude towards ART among women attending selected infertility clinic of Mangalore. Descriptive research design was adopted. A structured knowledge questionnaire and attitude scale was used to collect data from 100 primary infertile women attending infertility clinic undergoing follow-up treatment using purposive sampling technique. The results of the study revealed that majority (65%) of the women had poor knowledge, 20% had average knowledge, 15% had good knowledge whereas none of them had very good knowledge. Majority (91%) of the women had favorable attitude whereas minority (9%) had unfavorable attitude. There was significant association of knowledge scores with wife's age ($\chi^2=13.59$), educational status ($\chi^2=14.69$) and marital relationship ($\chi^2=9.14$) whereas no association with wife's occupation ($\chi^2=3.81$), husband's age ($\chi^2=1.55$) and husband's occupation ($\chi^2=2.70$).

Introduction:

Pregnancy is a unique, exciting, and often joyous time in a woman's life, as it highlights the woman's amazing, creative and nurturing powers while providing bridge to the future. But some less unfortunate couples are unable to fulfill their dream of having the desired baby because of infertility. Infertility is typically defined as the inability to become pregnant after one year of sexual intercourse without contraception.¹

According to WHO, between 2 and 10% of couples worldwide are unable to conceive a child and further 10-25% experience secondary infertility.² The 2003 statistics have shown that 7% of the married women in India are childless, southern (10.9%) and western (10.7%) regions show highest percentage of infertility followed by eastern region (6.5%). In India, the state-wise Andhra Pradesh shows highest percentage of childless women (13.3%) followed by Goa (11.8%).³

Infertility is a very distressing type of crisis. It threatens many aspects of a couple's life – not only the partners' relationship with each other but it also affects their individuality and the relationship with friends and family.² The main cause of infertility may be due to problems with sperm (in 35% of couples), problems with ovulation (in 20%), problems with fallopian tube (in 30%), problems with mucus in the cervix (in 5% or fewer), and unidentified factors (in 10%). It is estimated that women who are overweight have a chance of infertility (12%).⁴

Management of infertility includes both physical and emotional care of the couples. Emotional care of the couple includes counseling and support by the nurse, doctors, and family members. Surgical management of infertility is ART. ART can be the solution for the women who used to try other methods for having children when natural process fails. Various ARTs are being used today such as IUI, IVF, GIFT, ZIFT, IVF with ICSI and micro-manipulation.⁵

The investigator observed that though treatments were available, many factors like misconception, malpractices, and of course their cost effectiveness inhibited women from obtaining such treatment. For many couples who fail to respond to surgical/medical therapy, ART procedure offers new hope with improved delivery rates. Thus the investigator felt the need to assess the knowledge and attitude of infertile women regarding ART.

Review of the Literature

A study was conducted to explore the psychosocial consequences of childlessness in Ranga Reddy District in Andhra Pradesh, India. The sample consisted of married women aged 20 years or more who had been married for at least three years with no live birth. The results showed that the rate of childlessness was 5%

and most of the infertile women (14%) started allopathic treatment and visited holy places after three years holy places for not having a baby. For minority of the women there was a risk of divorce and husbands marrying a second wife to have a child. Two-third of the women experienced violence from their husbands. The study concluded that there was a need for infertility investigation and treatment to be included in the reproductive health programme in India.⁶

A descriptive cross-sectional study was conducted to evaluate the knowledge and attitude of infertile couples about ART at patient infertility clinics of University Hospital, Tehran, Iran. The data was collected from 400 infertile patients by a self-administered structured questionnaire. The study findings showed that 167 patients (41.7%) had good knowledge, but 223 (55.7%) had poor knowledge on ART; 95% of patients disagreed to have sperm or ovum donation or to undergo surrogacy; 22% of the patients agreed with embryo reduction; 94.5% of the patients mentioned that ART expenses cannot be afforded readily. The study concluded that less than half of the patients presented to be knowledgeable about ART, expense was mentioned to be burdensome by nearly all the patients.⁷

Objectives of the study

- To determine the knowledge of women regarding ART as measured by structured knowledge questionnaire.
- To determine the attitude of women regarding ART as measured by attitude scale.
- To find the association of knowledge scores with demographic variables.

Methodology:

Setting: The study was conducted at selected infertility clinic of Mangalore

Population: Primary infertile women attending infertility clinic at Mangalore

Sample size: 100

Sampling technique: Purposive sampling technique

Research design: Descriptive design

Tools:

- Demographic proforma
- The structured knowledge questionnaire on ART had a total of 26 items. A score value of one (1) was allotted to each correct response. Knowledge scores were arbitrarily divided into four: <40% (Poor), 41-60% (Average), 61-80% (Good) and >81% (Very Good).
- The Attitude Scale regarding ART had 14 items with responses

Strongly Agree (SA), Agree (A), Uncertain (U), Disagree (DA) and Strongly Disagree (SD). The positive statements had the scoring 5, 4, 3, 2, 1 whereas the negative statements had 1, 2, 3, 4, 5. According to the total score obtained, it was arbitrarily classified into two: 14–42 (Unfavourable) and 43–70 (Favourable).

Data collection method:

- Prior to data collection, permission was obtained from the concerned authority for conducting the study.
- Subjects were selected according to the selection criteria.
- Informed consent was obtained from the samples.
- Questionnaire and Attitude scale was administered to 100 infertile women attending infertility clinic.

Result of the study:

The demographic data showed that highest percentages (51%) of the women were in the age group of 26–30 years. Majority (75%) of the women were Hindus. Highest percentage (36%) of the women had secondary education. Highest percentages (45%) of the women were house-wives. Highest percentage (41%) of the women had marital relation above 6 years. Highest percentage (38%) of men were in the age group of 31–35 years. Highest percentages (30%) of men were professionals.

Description of knowledge scores among women

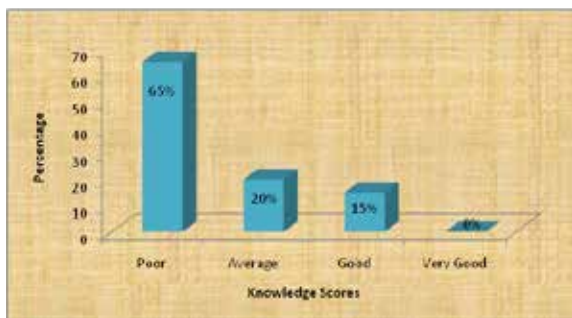


Figure 1: Bar diagram describes percentage distribution of samples according to their knowledge scores

The data presented in figure 1 show that majority (65%) of the samples had poor knowledge, 20% had average knowledge, 15% had good knowledge whereas none of them had very good knowledge.

Table 1: Percentage distribution of samples according to their attitude scores
N=100

Attitude scores	Percentage (%)
14 – 42 (Unfavorable)	9
43 – 70 (Favorable)	91

The data presented in the table 1 show that majority (91%) of the women had favorable attitude, whereas minority (9%) had

unfavorable attitude.

Association of knowledge scores with demographic characteristics

There was significant association of knowledge scores with wife's age, educational status and marital relationship whereas no association with religion, wife's occupation, and husband's age and occupation.

Conclusion:

Knowledge of infertile groups about ART is the fundamental parameter to optimise the infertility treatment. In the current scenario, the number of women seeking infertility services has been tremendously increasing. It is important that professional nurses should learn more about infertility treatment and its options, as the public looks to nurses for guidance in all aspects of healthcare. The caring aspect of professional nursing is essential component in moulding a positive attitude among infertile couple.

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