



## Original Research Article

## Infertility practices in the public sector in Telangana

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## ABSTRACT

**Introduction:** Infertility exists across all strata of people, but the treatment of infertility is limited to only the few who can afford the expensive treatment. A center was set up in the Government Medical Hospital for the treatment of infertility and a study was conducted to see the utilization of services after its initiation. **Objectives:** To study the utilization and pattern of patients who attend the infertility OPD in Gandhi Hospital.

**Materials and Methods:** All patients who attended the infertility clinic in Gandhi Hospital during the period January 2019 - September 2019 (9 months).

**Results:** 3549 patients attended the infertility clinic during the study period. 75% of the patients were in the 20-30-year age group. Only 11% of clients had knowledge of the fertile period in the < 20-year age group. In the other 2 groups 42-50% of patients had knowledge of the fertile period. Drugs were given to patients to conceive prior to coming to Gandhi, but many patients did not know what exactly was given to them. Husband semen analysis was done only in 25%. Most of the cases were in the primary infertility group

**Conclusion:** There is need for Infertility cases to be treated in the public sector and the treatment has to be standardized

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## 1. Introduction

Infertility has always been a cause of concern through the ages. Even in the ancient Vedas, the woman who was not a mother of sons, unmarried, childless or the mother of daughters was looked down upon. But the males were considered to contribute to infertility only as late as 1881 when Doctor Levy actually inspected the semen of an infertile couple. Infertility treatment is expensive and beyond the reach of the common man. The desire to be parents makes childless couples to either go in for the expensive treatment or give up due to lack of affordability. To complicate things in our country, we have alternate medicine practitioners who also dabble in infertility treatment. The health infrastructure in India has a potential to provide basic services for infertility.<sup>1</sup> These hospitals also have experienced and trained gynaecologists.

So this led to the Government of Telangana starting an Infertility Unit in the premier Gandhi Medical College & Hospital in April 2017 to give a ray of hope to these couples. Publicity was given at its inception, and the health workers were asked to spread word about the facilities and services offered. This study was undertaken from the period January 2019 to September 2019 to see the services of the infertility unit being utilized and its effectiveness.

## 2. Aims of the study

To study the utilization of Infertility services in the public sector and the pattern of patients who attend the clinic over a 9 month period.

## 3. Materials and Methods

A retrospective study was undertaken. The period of study was from January 2019 to September 2019. All cases that

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attended the infertility OPD who were trying for a baby for more than a year were included.

**4. Results**

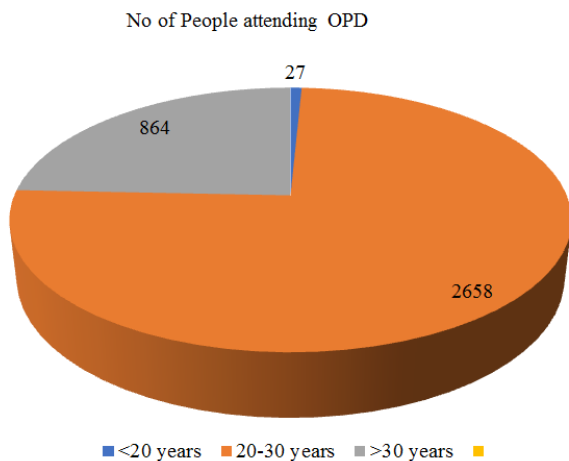
**Table 1:** No. of people attending OPD

Month-2019	Gyn OPD	Infertility OPD	Total no. of cases- Obs & Gyne
January	1712	341	5031
February	1684	326	4831
March	1789	438	4687
April	1789	477	5423
May	1670	435	4780
June	1504	314	4311
July	1778	557	4978
August	1463	343	4202
September	1474	318	4257
Total	14863	3549	42500

Of the total number of cases that attend the outpatient department of the OBG department, (42500) during the study period, 14863 cases, 35% (34.97) attended the Gynae OPD. Of these, 8.35 % attended the Infertility OPD.

**Table 2:** Age distribution of PTS

Month	< 20 years	20-30 years	>30 year
January	3	250	88
February	3	230	93
March	3	332	103
April	3	365	109
May	3	329	103
June	3	233	78
July	3	419	135
August	3	258	82
September	3	242	73

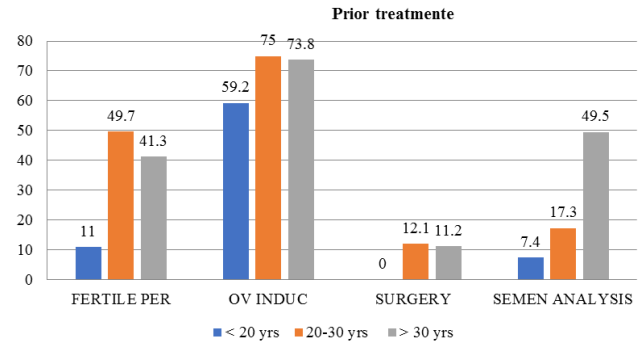


**Fig. 1:** No of People attending OPD

Regarding the number of patients attending the OPD, 75% of the patients were in the 20-30-year age group, 24% in the more than 30-year age group. Less than 1% were in the below 20-year age group.

Of the total number of patients who attended only 21 (out of 42500) attended for the first time (< 1%).

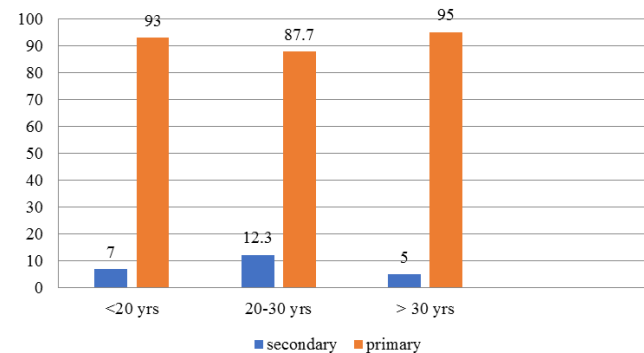
Of all the patients who attended the OPD, only 1% (451) had attended Gandhi OPD for the first time.



**Fig. 2:** Prior treatment taken by patients.

2% of cases were attending the Infertility OPD for the first time.

Regarding the treatment taken by the patients prior to coming to hospital, knowledge of the fertile period was there in only 11% of the < 20-year age group. In the other 2 age groups, 42- 50% of the patients had some knowledge of the fertile period (many did not have correct knowledge however). Regarding ovulation induction, nearly 60% of patients in the < 20-year age group had some kind of ovulation induction. 73-75% in the other groups had it. Semen analysis seems to be a taboo in all our patients- even in the older age group (> 30 years) only 49.5 % had semen analysis. Miscellaneous investigations done were in the 20-30 age group. This included Hysterosalpingogram (26), Tube testing (47), and Diagnostic Hyster laparoscopy in 5 of the se patients (as a part if IVF). 5 of the patients visited our hospital after ART procedures. 32 of patients also had Intrauterine insemination.



**Fig. 3:** Primary vs secondary infertility

Regarding primary vs secondary infertility, the majority of cases that attended our clinic was in the primary infertility group (almost 90%)

## 5. Discussion

In our study, out of the 42500 women who attended the Obstetrics & Gynecology OPD, only 8.35% of patients attended the infertility OPD. These low figures could be due to the lack of awareness of the people about the existence of this specialized clinic even existing here in Gandhi Hospital. Although a lot publicity was given in the media, and involvement of the local health care workers in spreading the news, there is still a lack of knowledge of an infertility clinic being run in Gandhi Hospital. Publicity forms an important part of the private sector and seems to be working with the general public. From a long time, infertility treatment is in the hands of the private sector and for people to change their mindset and come to the public sector for treatment will take convincing.

In our study, it is sad to see that 1% of patients were in the < 20-year age group. Adolescent infertility is unheard of in the western world (but adolescent contraception and unintended pregnancies are the problems.<sup>2</sup> In our culture, early age of marriage and conception is a problem.<sup>2</sup> Although it is in 1% of the girls- this should have been zero. No teenager should be pressurized to have a baby and to undergo the humiliation of being examined by an infertility specialist. To our OPD, no husband (partner) accompanied the women and the only time we ever interacted with him was at the time of Intra uterine insemination (which we have just started). Infertility is understood by most as being the problem of the female partner - which was evident in our study group too.

In the above 30 age group (24 %) there were 5 patients who had In Vitro Fertilisation before outside. On deeper interrogation, these 5 patients had exhausted all their resources and come to the government hospital as their only lifeline left.

Of the total number of patients who attended, 75% were in the 20-30% age group. 10.53% of all the patients were in the secondary infertility group.

Treatment history taken by the patients was not clear. Many had taken treatment by alternate practitioners also. Records were also not well preserved. Only the surgical history (and other procedures) given by the patients can be relied on.

Although there has been a 15% increase in the budgetary allotment to the Health Sector by the Government of India in the 2019-20 budget (up from 2018-19), there has been a 60% increase in the budgetary allotment to the tertiary care sector, in spite of the primary care sector needing it. Infertility treatment cannot be a priority for the government, with the population of India already bursting at the seams. But we Gynecologists who deal with this problem of

infertility on a day to day basis, recognize the severity and importance of this problem.

Infertility is a burning issue and has to be addressed. There is an absence of clear-cut protocols for management of infertility at all levels in the public sector.<sup>3</sup> The probable explanation being the priorities of the government is focusing on those diseases that need urgent and serious attention, infertility not at all being a priority. Diagnostic evaluation for infertility in women should be conducted in a systematic, expeditious, and cost-effective manner to identify all relevant factors with initial emphasis on the least invasive methods for detection of the most common causes of infertility.<sup>4</sup> This was recommended by the Practice Committee of Reproductive Medicine in 2005.

### 5.1. Recommendations (Adapted)

1. Initial consultation should include history, past and family history (of both partners), surgical history, coital and substance abuse.
2. Physical examination should include general and local examination. A PAP smear should be taken.
3. Diagnostic Evaluation- should be done in a systematic, expeditious and cost effective manner. This is of special relevance to the public sector as there are a large number of personnel who keep changing every few weeks/ months. Unless the system is streamlined, there will not be a continuity in the treatment offered and will adversely affect the results (pregnancy)
4. The male factor should be completely evaluated.
5. Ovulatory function- Ovulatory dysfunction will be identified in approximately 15% of all infertile couples and accounts for up to 40% of infertility in women<sup>5</sup> Regular menstruation is all that is required to diagnose ovulatory factors. Anovulation can be diagnosed clinically by abnormal uterine bleeding, amenorrhoea and oligomenorrhoea. Serum Progesterone provides a reliable and objective way of determining ovulation, provided the timing is right. In our laboratory progesterone estimation is being done. Endometrial Biopsy was originally considered the gold standard to diagnose ovulation is now obsolete. The test lacks accuracy and precision, and cannot distinguish between fertile and infertile women.<sup>5,6</sup>
6. Ultrasonography- this has revolutionised the management in Gynaecology. The Transvaginal probe has proved to be a great boon. We have a machine in our set up exclusively for infertility work up. Sonohysterography and sonosalpingography can diagnose uterine structural abnormalities and the patency of the fallopian tube.

If still the patient did not conceive after 3-6 cycles of ovulation induction, patients are being offered Intra uterine insemination. As this is still in the nascent stage, positive

results will go along way in helping these women to conceive

## 6. Conclusions

Based on our study, and observations, there is a need for including treatment of infertility in the public sector. It is possible to treat infertility in the public sector at a shoe string budget.

### 6.1. At The community/ primary level

Take a proper history, examine both partners

Treat any treatable cause

Semen Analysis

Counsel both partners, advise on the fertile period, refer appropriately

### 6.2. At Next Level (Medical College Level)

Semen analysis

Treat infections

Ovulation induction

Ultrasonography

Hormonal estimation

Intra uterine insemination

Diagnostic Hysterolaparoscopy

Unless a proper Standards of Protocol (SOP) are established and put up in all the primary level, and a step wise protocols are established, the system will not work. Since continuity of personnel who work in the Unit, cannot be established, it is better to follow a strict SOP. Treatment of infertility in the public should be standardised (not individualised). Counselling should form an important part of the team approach.

Public- private partnerships can be considered also in dealing with the poor infertile patients.

## 7. Source of funding

None.

## 8. Conflict of interest

None.

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