Reproduction is a unique and significant characteristic of living species. Human reproduction requires highly specialised function regulated by a meticulously programmed sequence of events under precisely co-ordinate timings. Stress, environmental factors, hormones, chromosomes all are playing very important role in reproduction. Infertility is a common problem and affects more than 10% of married couples. The female partner is responsible for more than 60% of infertility.

The causes of infertility are manifold and difficult to determine. Hence, detailed investigations are required to understand the particular anomaly. Moreover, with the traditional emphasis of women’s role being defined in terms of her infertility, involuntary infertility represents a social stigma usually unfairly borne by the women.

Hormonal factors play a key role in the control and regulation of female reproduction. In several cases, sex anomalies may arise from endocrine alteration alone due to hypo- or hyper function of the endocrine glands regulating reproductive processes.

Keeping this in mind, this study was aimed at providing useful information on endocrine aspects of female infertility, which would aid in the diagnosis and management of patients and enable professional counselling and guidance of these cases. Therefore in the present study in the Part I, details of clinical history, physical feature, ultrasonography, hormone assays and chromosome analysis (if necessary) were correlated in each patient in an attempt to comprehensively define
the various causes of infertility.

On the other hand, fertility control has come to the fore front as a topic of global concern, with important medical, social and political considerations due to the population explosion. India being the second largest country in terms of world population, the problem of population control requires urgent attention. At present population explosion is becoming a hurdle towards development of the country.

A number of contraceptive methods are available in the country viz. barrier contraceptive, oral contraceptive, sterilization, IUDS, vaginal rings, etc. It is known that in ancient India plant products had been used as contraceptive agents. Moreover, in our laboratory also it has been reported that *Carica papaya* seed extract have definite antifertility effects in male mice and rats. It is also known that the seed extract manifests abortifacient effect in female rats.

Hence, the present study in Part II undertaken to study effect of papaya seed extracts (benzene and alcoholic) on the structure physiology of uterus and ovaries in order to assess their contraceptive efficacy and side effects, if any. Moreover, toxicology studies were also carried out to investigate if the extract possessed side effects on female rats, if any.

The work also included the withdrawal studies of papaya seed extract to investigate reversible effects of papaya seed extract treatments.
RESEARCH PAPERS PUBLISHED


ABSTRACTS PRESENTED


3. HARSHA JOSHI, PRIYA PADMAN, H.N. HIGHLAND AND N.J. CHINOY. Evaluation of infertile couples in Gujarat state. XI th National Symposium on Reproductive Biology and Comparative Endocrinology, 29-
30 Jan. 1993, Tirupati, India, Abstr. No.107, pp.73.


**WORKSHOP ATTENDED**