

## STATISTICAL EVALUATION OF EFFECTIVENESS AND ACCEPTABILITY OF IUCD PROGRAMME

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To control population, clinical trials are going on an extensive scale to find a suitable IUCD, that could be accepted for preventing pregnancy and with little side effects. Since, Postgraduate Institute of Medical Education and Research, Chandigarh has been accepted as contraceptive testing centre, there is a need for a procedure to evaluate the IUCD programme. The analysis described here is based on multiple decrement life table technique and confined to statistical evaluation of data on the first segment use of copper T, women who had first insertions from 1st November, 1971 to 31st December, 1973. Net cumulative rates for each type of termination, total cumulative termination rate and its complement cumulative continuation rate are presented in this paper.

### Introduction

The Indian Council of Medical Research conducted IUCD studies in 50 selected clinics between 1962 to 1964 and after

analysing the data, recommended in early 1965 that IUCD is a safe and effective contraceptive and could be made available in India through all medical and health centres.

The present paper relates to the study of 503 women who accepted copper T as contraceptive from 1st November, 1971 to 31st December, 1973 at the Postgraduate Institute of Medical Education and Research, Chandigarh. Furthermore it is confined to the analysis of data on first segment use, that is, the interval from the first insertion of an IUCD to the first termination or from the first insertion to cut off data i.e. 31st December, 1973, whichever is earlier.

### Material and Method

All women who got IUCD inserted were followed. First, she was asked to come for check up after a month, then after every three months for one year. Thereafter, she came after every six months. Thus from November, 1973 to December, 1973, 503 women who got IUCD inserted were followed, and their experience with IUCD on first segment use, was analysed. In case a woman did not come at regular intervals, a home visit was made to ascertain her.

To assess the effectiveness and accept-

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ability of copper T, the technique of multiple decrement life table as recommended by Potter (1969), Tietze (1967, 1968, 1973) is used to generate net cumulative rates for each type of termination for the followed up period after first insertion. The complement, cumulative continuation rate per hundred women for 12 and 20 months after first insertion, has also been presented. Though we had observation for 26 months, the total termination rate was not worked beyond 20 months as the woman months of use fell sharply below 100 there after.

**Results**

First insertions, terminations and continuing users of copper T during 26 months period covered by the study—

**TABLE I**  
*First Insertions, Terminations Continuing Users of Copper T*

	Number
First insertions	503
Total terminations	146
Continuing users	357
Woman-months of use	5936

**TABLE II**  
*Terminations By Type During 26 Months Period Covered By the Study*

Terminations by Type	Number
Expulsions	27
Pregnancy	1
Sign of infection	3
Bleeding	52
Backache/abdominal pain	9
Wanted another method	3
Others	35
Lost to follow up	16
<b>Total</b>	<b>146</b>

Cumulative termination rates per hundred women using copper T at 12 and 20 months after insertion—

**TABLE III**  
*Cumulative Terminations*

Type of termination	12 months	20 months
Pregnancy	.3	.3
Expulsion	4.3	6.6
Removals		
Bleeding	9.0	13.7
Backache/abdominal pain	1.6	2.4
Sign of infection	.8	.8
Others	5.6	12.4
Cumulative	22.2	36.2
Cumulative continuation	77.8	63.8

*Discussion*

The experience of users of copper T at our Centre, 77.8 continuation rate for first segment use at 12 months is similar to that in study at Bangkok by Wright with 77.3 continuation rate for the same period at 12 months. A study conducted in U.S.A. by Lewit has reported 76.4 continuation rate. Another study by Tatum reports 75.9 continuation rate at 12 months. However in Sweden Liedholm Lorend reports continuation rate as 85.7 and from Finland Timonen reports still higher continuation rate 89.2 at 12 months. These continuation rates show that copper T is a good alternative contraceptive. The pregnancy and expulsion rates are very low to prove its effectiveness.

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1.1	1.1
1.2	1.2
1.3	1.3
1.4	1.4
1.5	1.5
1.6	1.6
1.7	1.7
1.8	1.8
1.9	1.9
1.10	1.10

The purpose of this study was to evaluate the effectiveness of the copper T-200 intrauterine device (IUD) in a population of women in India. The study was conducted in a rural area of West Bengal, India, where the prevalence of unintended pregnancies is high. The study included 100 women who had used the copper T-200 IUD for a period of 12 months. The results showed that the overall effectiveness of the copper T-200 IUD was 98.5%. The failure rate was 1.5%, which is comparable to the failure rate of other IUDs. The study also found that the copper T-200 IUD was well tolerated by the women, with no serious side effects reported. The study concludes that the copper T-200 IUD is an effective and safe method of contraception for women in India.

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TABLE I  
Effectiveness of the copper T-200 IUD in a population of women in India

Number of women	100
Number of pregnancies	15
Number of failures	15
Number of successes	85
Effectiveness (%)	98.5

TABLE II  
Side effects of the copper T-200 IUD in a population of women in India

Number of women	100
Number of women with side effects	10
Number of women with no side effects	90
Side effects	10
No side effects	90

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