



## Intrauterine Contraception in Nepal: Cohort Study

### Introduction

Despite a long history of service provision contraceptive prevalence in Nepal remains low (around 38%) and the total fertility rate is 4.1. Among users of family planning, the method mix is dominated by female sterilisation (42%) and Depo Provera (24%). The intrauterine device (IUD) provides an effective, safe and low cost contraceptive option. We previously identified knowledge and service related barriers to its use in Nepal.

### Research Aims

The present study was designed to assess the acceptability of the IUD to clients of Sunaulo Parivar Nepal (SPN). The primary outcome measure was the proportion of women opting to continue with the IUD. Secondary outcome measures were occurrence of adverse effects, and analysis of socio-demographic variables.

### Research Methods

A cohort study was undertaken in three rural districts, Ilam, Morang and Jhapa. The districts were selected so as to provide a range of economic and social conditions. Promoters were briefed and IEC materials were designed based on previous research and used to publicise the availability of intrauterine contraception. Clients were counselled about the method and screened to exclude pregnancy and STI risk.

Staff of SPN clinics were trained in the Government programme to undertake IUD insertion. Following insertion, follow up was

arranged at 4-6 weeks and at intervals to a total of 8-11 months.



### Findings

#### Characteristics of clients.

333 clients requested IUD insertion. Their ages ranged from 17-41 and all were married. 57% of the clients had 1-2 children, 37% had 3-4 and the remainder had 5 or more children. 31% had received no formal education.

With regard to previous use of contraception, 76% had used a method with Depo-Provera being the most popular at 58%. Only five clients had previously used the IUD. However, recent use of contraception was less common: only half of the clients had used any form of contraception within the last three months.

The most common route of referral for IUD insertion in all areas was via the female community health volunteers. In Jhapa, clients also reported that they had heard about the IUD on the radio. Insertion of the device was carried out by trained staff. Analgesia was used in 17 cases (5%).

### **Main outcome: continuation**

Follow up data were available for 229/333 clients (69%). 25 clients requested removal of the device. Two of these women then had the IUD reinserted and continued with it. The continuation rate is estimated at 93% over 8-11 months' follow up. Just over half of those who discontinued did so within the first three months and the rest had discontinued by 6 months. Two IUDs were expelled; neither client had the device reinserted. No pregnancies were documented during the period of follow up.

### **Adverse effects and requests for removal**

Reasons for requesting removal were either adverse effects or domestic circumstances. Seven removals were because of bleeding, 6 for pain and 4 because of vaginal discharge. In three instances removal was at the insistence of the husband, in three cases the husband had a vasectomy so the device was no longer needed, and in two cases contraception was no longer required as the husbands had left the household for an extended period.

### **Clients' experiences of care**

All the clients reported received counselling prior to insertion. Of those who had the device removed, 80% chose an alternative method of contraception. By the end of the follow up period, 81 % of clients interviewed reported no adverse effects from the IUD and 96% stated they would be happy to recommend the IUD to others.

Availability of follow up was rated as very important by almost all clients. Indeed, 85% of the women stated they would not have accepted the IUD if follow up was not available.

### **Statistical associations with continuation**

Associations between the likelihood of continuing with the IUD and clinical, socio-economic and educational variables were investigated. Significant associations identified were:

- Those who experienced no adverse effects were more likely to continue with the IUD compared to those experiencing adverse effects;
- Those whose habit was to take painkillers when in pain were more likely to continue than those who did not use analgesia;
- Those who characterised their menstrual periods prior to insertion as 'light' were more likely to request removal than those with 'moderate' or 'heavy' periods;
- Clients who reported that their husbands were not happy that the IUD had been inserted were more likely to discontinue.

No statistical associations were found between discontinuation and age, level of education, district, parity and economic status as assessed by an asset score.

### **Conclusions**

The experience of the three districts documented in this study indicates **substantial untapped potential for intrauterine contraception** in Nepal. Important negative findings were that demographic and socio-economic variables were not a constraint on continuation with the IUD. Women clearly expressed their desire for **follow up by the provider** following insertion so as to feel confident with the IUD as a method of contraception. The need to **involve men in family planning decision-making** is highlighted.

Scaling up provision of intrauterine contraception will require **sustained marketing strategies** to increase knowledge and uptake. Further research on the **cultural significance of menstruation** and **care seeking for menstrual problems** would provide material to enhance pre-insertion counselling.

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