

**Research Article**

## **A RAPID APPRAISAL OF IUCD (ALTERNATIVE METHODOLOGY) TRAINING AND IMPLEMENTATION IN ASSAM**

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### **ABSTRACT**

Aims and objective of the current study was to assess how knowledge translation is happening at the district level by assessing the performance standard of service providers in Assam. Setting and Design: A rapid appraisal of all Districts of Assam using a pretested, predesigned schedule along with record review. For assessment six areas were selected. A standard scoring system was used to quantify the qualitative observation findings. Statistical analysis included Rates, ratios and univariate analysis using chi-square test ( $p < 0.05$ ). Average score in human and physical resources was 89%, client focused information, education and communication (IEC) was 50%, management system 59%, infection prevention practices 86%, counseling 76% and follow up visit and management of potential problem was 74%. Total achievement percentage was 77%. Maximum achievement, found in primary health center (PHCs), followed by Civil Hospitals and difference was statistically significant ( $p < 0.05$ ). Information education and communication, counseling and infection prevention practices need further improvement.

**Key Words:** *Intrauterine Contraceptive Devices (IUCD), Alternative Methodology for Training, Assam, Primary Health Centre (PHC), Community Health Centre (CHC) and Sub Centre (SC)*

### **INTRODUCTION**

In India only 1.8% women of reproductive age use IUCDs, despite the fact that Govt offers IUCD services free of cost, it still remains largely underutilized (IUCD, 2007). Women using IUCD requires follow up, clinical examination, counseling and further investigation if required (Agarwal *et al.*, 2004). Women in India face constraints not only in obtaining health services, but also in expressing reproductive health needs (Pandot *et al.*, 2005).

IUCDs in the form of Lippes Loop were introduced in the National Family Welfare Program of Government of India (GOI) in 1965 and have always been considered an important spacing method. Based on the results of clinical trial conducted by Indian Council of Medical Research in 1972, Copper T 200b was introduced in the program in 1975. In 1997, ICMR conducted a comparative study between IUCD 200B and 380A based on which CuT 380A was introduced in 2002, replacing CuT 200B in the programme. The Government of India, as part of its commitment towards provision of quality spacing services in Family Planning, introduced CuT380A in 2002 with an effective protection for 10 years replacing the earlier CuT 200. But yet the acceptance of Intra Uterine Contraceptive Device (IUCD) continues to remain below 2%, out of the total Couple Protection Rate of 48.5% for the use of any modern contraceptive method (NHFS-3). One of the objectives of National Population Policy 2000 is to address the unmet needs for contraception. Achieving population stabilization, gender and demographic balance through universal access to equitable, affordable and quality health care, which is responsive to the needs of the people is the objective of the National Rural Health Mission and RCH II launched in 2005. The latest NHFS-3 data shows an unmet need of 6% for spacing methods with a marginal decrease of 1% in the last 7 years (IUCD, 2007).

Some of the major reasons identified for the low acceptance of IUCDs are lack of correct and complete information, both among the providers and acceptors; the advantages are understated, the disadvantages tend to be exaggerated; many myths and misconceptions prevalent in the community and among the providers leading to non acceptance; low insertion skills of the service providers and above all, limited access to skilled service providers. One of the reasons for low knowledge and skills on IUD provision

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among health providers have also been due to the low priority given to contraceptive skill development of health providers in their basic training. The basic training books of doctors and paramedical also do not provide detailed information on IUCDs and both knowledge and skill training are mandatory requirements for quality provision of this service (IUCD, 2007).

IUCD (CuT 380A Alternative training methodology) training has been started since Nov'2007 in Assam. As there is heterogeneity in implementation report these monitoring were planned to do onsite rapid appraisal of IUCD training and implementation in Assam; to assess how knowledge translation is happening in different districts of Assam.

### **MATERIALS AND METHODS**

The new method of IUCD insertion technique training called alternate methodology is for a shorter duration of six days compared to conventional training of longer (3 month) duration, where practice was done in Family planning unit, while in this new method training a dummy i.e., Zoe model is used to facilitate practice so that one become proficient with anatomical humanistic models and will take five to ten live case to get clinically proficient in insertion of IUCD. Alternate methodology also emphasizes on behavior modeling of the service providers along with building skill competency with guide and skill acquisition where the service provider can do activity without guidance. Competency based training develops the skills, knowledge, and attitudes required to meet standards of competence. Training continues until each trainee is competent to provide IUD services. The approach focuses on the success of each trainee, recognizing that different providers need differing amounts of practice to reach competence. Key elements of the competency-based approach include standardization of the way that the trainers themselves provide IUD services, practice with a pelvic model, and opportunities for trainees to continue practicing until they have mastered all necessary skills (Population Report, 2006).

In this new method of training besides skill building importance is given for proper selection of cases based on WHO's Medical eligibility criteria (MEC), client assessment including history, physical examination, to provide quality health care, using no touch technique for insertion and following universal safety precaution and infection prevention practices by use of high level disinfection (HDL) method. There is schedules follow up visit for management of potential problems and more importance is given for three types of counseling i.e., general, method specific and follow up counseling (Population Report, 2006).

Pretested, predesigned standard schedule was adopted from NIHFV, for doing the assessment which was supplied for monitoring of family planning activities at different levels. For assessment six areas were selected i.e., human and physical resources (total score is ten for ten areas observed), clients focused (friendliness) IEC material for family planning (total score six), management systems (total score three), infection prevention practices (total score eleven), general counseling of family planning services to new clients (total score five) and management of potential problems (total score six). Observation method was used for data collection by study investigator. A scoring system was used to quantify the qualitative observation findings. All six areas assessed were summed up and average achievement percentage was calculated. The scoring system is viewed as a rapid assessment tool, which can be used by field workers and nursing students without any formal training in statistics or research methodology (Anandalakshmy and Mittal, 1995). District wise summary of scoring of all areas was done by adding the score of each area. Implementation report of each district was also collected from routine data generated from health and family welfare department and district wise comparison was made. Study period was from 1<sup>st</sup> September to 30<sup>th</sup> November'2010. The study team composed of a five team members of state level facilitators for IUCD training. The assessment procedure of facilitators was considered as gold standard against which the activity at different facility by different service providers was compared. Assessment was done by onsite visit by the study team and observing different procedure of service delivery along with record review. One day training session was also attended by study team to assess the training quality. Facility wise comparison of activity was done by study team. From each district; CHC, PHC and

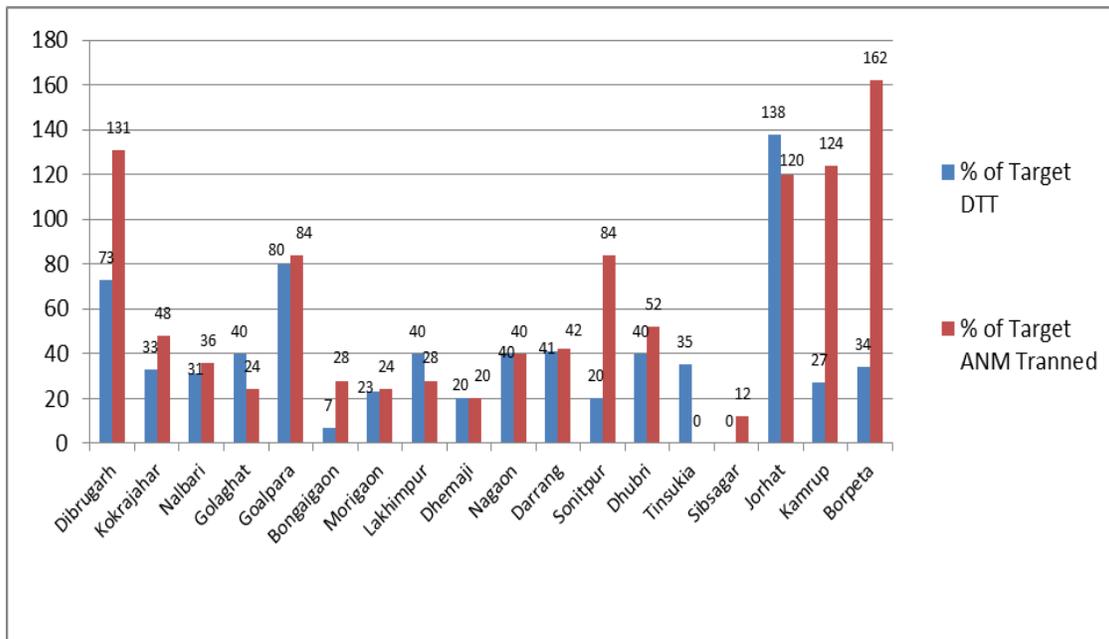
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S/C where, trained manpower by alternate methodology of training and services available; were included in the study. Those districts where training has not yet been started were excluded from the study. Rates, ratios, proportion and univariate analysis using chi-square test was done.  $p < 0.05$  was considered as significant.

A total of eighteen districts have been covered in the monitoring activity. Twenty three primary health centers, eight civil Hospital and eight sub-centers were included in the study depending on the trained manpower availability.

**RESULTS**

Out of total 230 state level trainer 198 was trained (86.09%), while out of 3450 district level trainer cum service provider (Medical Officer and GNM), 1245 (36.09%) was trained. Amongst ANMs 29.84% i.e., total of 1716 out of 5750 were trained as service provider to make the service available at the peripheral level. Only one District i.e., Jorhat crossed the target training load for both ANM and MOs, while three more District namely Borpeta, Dibrugarh and Kamrup completed ANM training load as per plan. All other district has not yet completed the planned batches of training and Sivsagar District is lagging behind in reaching the planned target training load compared to other districts where training has been started and reporting has been done (Figure 1).



**Figure 1: District wise distribution of trained manpower for training and implementation**

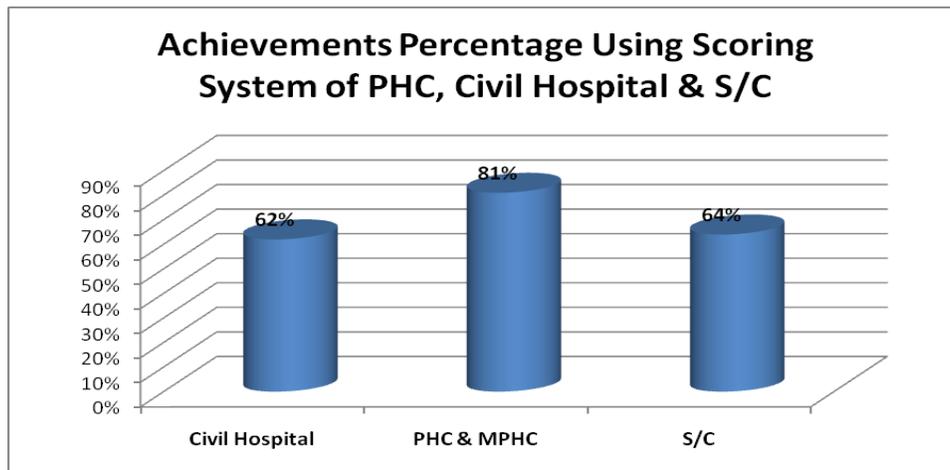
Total reported insertion of all district was 18,107 in six month i.e., from 1st April to 31st Oct'2010; showing highest insertion rate in Dhubri and no data found in nine districts of Assam. Average score in human and physical resources was 89%, client focused IEC material for family planning 50%, management system 59%, infection prevention practices 86%, general counseling of new clients 76% and follow up visit and management of potential problem was 74%. The total achievement percentage was 77% for the state of Assam. According to achievement percentage using scoring system the highest achievement percentage was seen in Kamrup (98%) followed by Dibrugarh (96%), while Golaghat (44%) and Tinsukia (46%) district is lagging behind amongst the other implementing Districts. This distribution also shows heterogeneity in implementation in different Districts of Assam (Table-1).

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**Table 1: District wise achievement Percentage using scoring system**

<b>Districts Wise Scoring Percentage</b>							
	<b>Human &amp; Physical Resources (I)</b>	<b>Client Focused IEC Materials (II)</b>	<b>Management Systems (III)</b>	<b>Infection Prevention Practices (IV)</b>	<b>New Client Counseling (V)</b>	<b>Follow up &amp; Management (VI)</b>	<b>Total Achievement Percentage</b>
Dibrugarh	100	83	83	100	100	100	96
Kokrajhar	65	33	67	64	100	83	67
Nalbari	100	33	50	100	50	50	77
Golaghat	64	27	33	38	44	47	44
Goalpara	90	33	50	100	50	50	71
Bongaigaon	80	28	44	70	60	22	59
Morigaon	90	17	67	100	80	67	85
Lakhimpur	90	67	67	100	60	83	85
Dhemaji	90	67	33	82	100	100	82
Nagaon	90	50	100	100	40	100	82
Darrang	100	67	67	100	80	50	82
Sonitpur	100	67	33	100	80	100	88
Dhubri	80	50	50	64	90	100	73
Tinsukia	77	17	33	39	47	44	46
Sivsagar	90	67	50	95	100	100	87
Jorhat	100	50	89	97	100	33	81
Kamrup	100	92	83	100	100	100	98
Barpeta	87	56	56	94	93	100	86
<b>Total (Average)</b>	<b>89</b>	<b>50</b>	<b>59</b>	<b>86</b>	<b>76</b>	<b>74</b>	<b>77</b>

Maximum achievement was found in PHCs, followed by Civil Hospitals and sub centers (Figure - 2). This difference between PHC vs CHC and PHC vs S/C was found statistically significant ( $p < 0.05$ ) (Table-2).



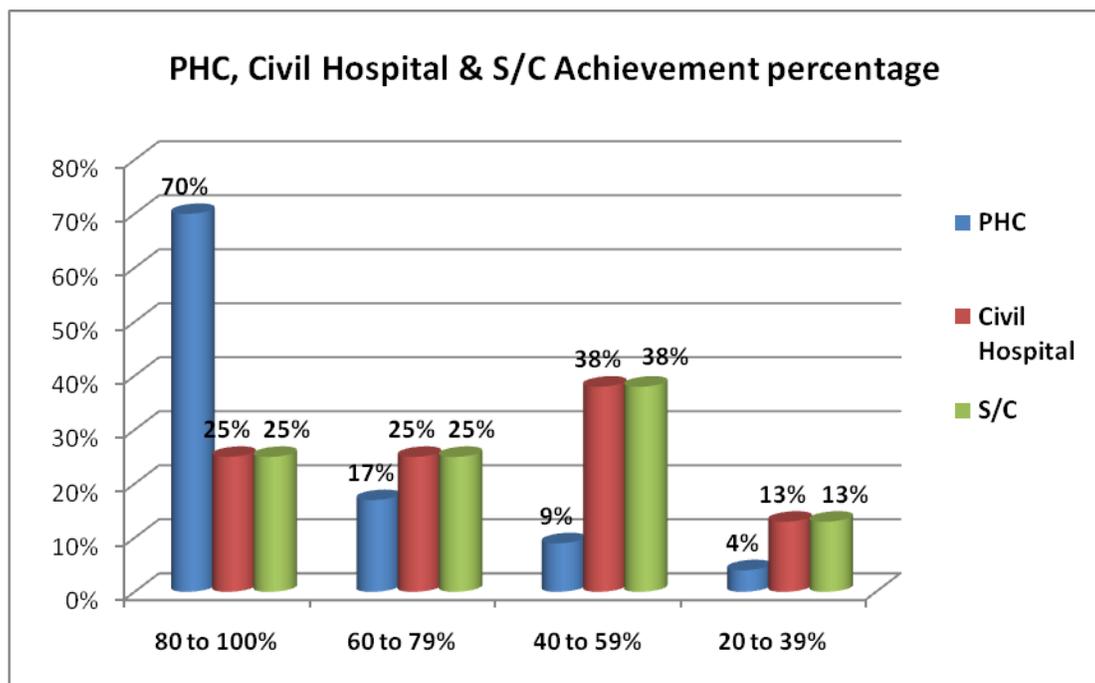
**Figure 2: Achievements Percentage of total PHC and MPHC ( Primary health centre), Civil Hospital and Subcentres using scoring system**

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**Table 2: Comparison of performance of different health setup using standard scoring system with statistical Analysis using Proportion Test**

	Total Observed	Total Achieved	Chi-square	p-value
Civil Hospital	328	204 (62%)	48.93	0.000*
PHC & MPHC	943	766 (81%)		
Civil Hospital	328	204 (62%)	0.32	0.571
S/C.	328	210 (64%)		
PHC & MPHC	943	766 (81%)	39.25	0.000*
S/C.	328	210 (64%)		

Significant ( $p < 0.05$ )



**Figure 3: Achievement percentage of different PHCs, Civil Hospital and S/Cs**

Amongst the PHCs covered 70% shows scoring between 80-100%, while 17% shows between 60-79%, 9% between 40-59% and 4% between 20-39%. On the other hand amongst civil hospitals covered 38% showing scoring percentage between 40-59%, while 25% shows 80-100% and 60-79% and 13% shows scoring between 20-39%. Sub centers were also showing similar result as civil hospitals (Figure-3).

**DISCUSSION**

State has covered majority of its training load. Though uniform support was given to all Districts there is heterogeneity in both training and implementation in different districts of Assam. Eight District of Assam could not show any training and implementation report, which indirectly reflecting the lack of recording and reporting system in those Districts. Though human and physical resources in the form of trained manpower and infrastructure is quite good (86.2%), but client focused IEC activity for family planning was poor (50%). One of the main reasons that IUCD is underutilized in India is that many health service providers and potential clients lack accurate, up to date information about it (IUCD, 2007). There is a need to keep proper records of IEC material in order to reduce its misuse, and to develop a community-based feedback system to evaluate the total IEC efforts for enhancing accountability. Health personnel also need to be trained for effective interpersonal communication. The potential of folk media needs to be explored in villages. The preparation of IEC material may be decentralized to meet local needs, cut

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expenditure and to provide opportunities for local talent. Management system was poor (59%) which also shows heterogeneous performance in different districts, though district Program unit and block program units exist in all districts, but lack of prioritization by some district regarding FP activity may be responsible for such difference. Infection prevention practices (86%), general counseling of new client (76 %) and follow up visit and management of potential problems (74%) showing a better scenario, though there is lot of scope for improvement. It is often found that the advantages are understated, the disadvantages tend to be exaggerated and many myths and misconceptions to problems related to provider's knowledge and skills leading to improper selection of clients, poor counseling and lack of follow up, all resulting in poor quality of services. Though, CHCs were better equipped in terms of both manpower and infrastructure, but comparison of performance standard between Sub centre, Primary Health Centers and Community Health Centers/ District Hospital showing better performance in PHCs followed by sub centers. These results may be indicating provision of more client friendly atmosphere in PHCs and S/Cs than CHCs. The achievement percentage amongst CHCs and sub centre; showing majority amongst 40-59%, while in case of PHCs majority showing achievement percentage above 80%. Reason for lower achievement percentage in S/Cs may be because of low confidence level from provider's side as ANM is the only family planning service provider at S/C level and also because of client having more confidence on Medical officers in PHCs than S/C ANMs. But in spite of availability of manpower in CHCs which is more than PHCs may be indicating the lack of client friendly IEC and counseling at CHC level. It has been shown that infection rates are not increased with long term use and there are definite benefits to using a contraceptive that does not have unwanted hormonal effects. Thus the IUCD has been given a bad but undeserved reputation and it is really worth looking at it as a method of contraception for many women (Frederick and Jelovsek). When properly inserted in the most appropriate candidate – a woman in a mutually monogamous relationship in which both partners are free of sexually transmitted infections (STIs) – the IUCD is amongst the safest methods of contraception and is much safer than the health risks associated with unwanted pregnancy. The IUCD even confers non contraceptive health benefits. For instance, research strongly suggests that it protects users against endometrial cancer (IUCD guideline by JHPIEGO and Medical Eligibility Guideline for Contraceptive use, MOHFW guidelines on standards of sterilization and NACO Guideline for Infection Prevention Practices has the potential to improve the quality of services (Limpaphayom *et al.*, 1997; WHO and Johns Hopkins Bloomberg School of Public Health, 2007; Standards for female sterilization services, by Ministry of Health and Family Welfare, Government of India, New Delhi 2006; National guidelines on Prevention, Management and Control of RTI including STI by NACO and MH division, Government of India, New Delhi, 2006; Comprehensive Reproductive Health and Family Planning Training Curriculum, 1997).

There is therefore an urgent need to address these programmatic concerns by improving IEC, providing client friendly environment for better counseling, infection prevention practices and motivating service providers to improve their confidence level so that this service becomes available and accessible to all.

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