# FINDINGS OF PPIUCD STUDY IN TAMIL NADU

### **INTRODUCTION:**

The Government of India has introduced the PPIUCD insertion as a semi permanent method during 2011-12 in the Country. The Gynecologist from IOG & K.M.C. hospital have been deputed to Mumbai during March 2010 for PPIUCD training and they are designated as State Trainer in PPIUCD. This Directorate has given training to doctors and staff nurses in PPIUCD insertion to improve the coverage of deliveries under spacing method and to reduce the maternal and infant mortality rate and also birth rate and thereby stabilize the population in Tamil Nadu. This Directorate has conducted a PPIUCD Study to know the use effectiveness of PPIUCD insertions and to study the retention rate of PPIUCD in Tamil Nadu during December 2013 with the financial support of NRHM fund

# **RESEARCH DESIGN & DATA COLLECTION:**

Delivered mothers who have accepted PPIUCD during 2011-12 in the 16 Medical College Hospitals including K.G. Hospital and G.H. Thirumangalam were the respondent for this Study. A total number of 13,648 mothers have inserted PPIUCD in these 16 MCH in the State during the year 2011-12. The list of mothers of PPIUCD Acceptors during the above reference period are arranged by date of acceptance in chronological order and given number serially to all the PPIUCD acceptors and 10 % of the mothers (1366) were selected for the PPIUCD Study by using systematic random sampling. If the mother is a visitor / left the place permanently, in that case, another PPIUCD acceptor next to the selected case in the PPIUCD list was selected. Questionnaire has been designed to collect data from the mothers.

The Block Health Statisticians, Sector Health Nurses of GPHC and Lady Health Visitors of U.H.P. have been nominated as Investigator. The Statistical Assistant, Statistical Assistant in charge / Block Health Statistician attached with DFWB are the Supervisor for the survey. The Acceptors interviewed using the survey schedule to study the use effectiveness and Retention Rate of PPIUCD in Tamil Nadu successfully.

# **FINDINGS**

#### **DEMOGRAPHIC FACTORS:**

- Nearly 59% of the PPIUCD Acceptors are in the age group of 20-24 followed by 31% in the age groups of 25-29, 6.5% in the age group of 34-44 and 4% in the age group of 15-19.
- Similarly, 72% of the PPIUCD Acceptors are with only one child followed 25% with two children, 3 % of the HOB mothers have accepted PPIUCD.
- It shows that the mothers with higher order of births are also using this spacing method as semi permanent method.

#### **SOCIO ECONOMIC FACTORS**:

- Religion wise PPIUCD acceptors show that 90% of them belongs to Hindu followed by 6% Muslims and 4% Christians.
- The literacy level of the PPIUCD acceptors is equal to their spouse (literate 96%).
- Among the PPIUCD acceptors, the graduates are less (5.8%) compared to their spouse (6.8%).
- Similarly, the SSLC/Plus two level completed are less (35.8%) compared to their spouse (37.5%).
- The total educational level of the PPIUCD acceptor is more (53.7%) compared to their spouse (49.6%) in the completion of 5<sup>th</sup>,8<sup>th</sup> and 9<sup>th</sup> Standard
- Most of the PPIUCD Acceptors are home maker (80%) followed by collie (17.6%) and the remaining are engaged in other profession (2.4%).
- Similarly, the occupational status of their spouse as collie / labour is 74.2% and followed by private salaried (11.6%), Driver (3.7%) and rest of them engaged in other professions.
- As per economic status of the family, the PPIUCD Acceptance is more in below poverty line - BPL category (54%) compared to above poverty line - APL category (46%).

# **MOTIVATION & COUNSELLING:**

- Mostly doctors are inserted (96%) the PPIUCD to the mothers after delivery
- 68.9% only motivated by doctors for PPIUCD insertions after delivery
- Only 11.1% of PPIUCD are motivated by RMNCH counselors
- Rest of them motivated by staff nurse-6.5%, sector health nurse-3.5%, village health nurse-3.5%, auxiliary nurse midwife-5.9%, self 0.5% and relatives 0.1%.

#### **AWARENESS OF PPIUCD & FP METHODS**

- 93% of the mothers are aware of Post Partum Sterilization
- 58% of the mothers are aware of Laparoscopic method
- 54% of the mother are aware of caesarian with sterilization
- 18% of the mothers are aware of mini lap sterilization
- 34% of the mothers are aware of MTP with TAT method
- 12% of the mothers are aware of MTP with MVA technique
- 34% of the mothers are aware of male sterilization of NSV method
- Nearly 70% of the mothers are aware of Oral Pills & Nirodh methods for spacing
- Only 18% of the mothers are known about the Emergency Contraceptive Pills
- Only 10% of the mothers are aware of PPIUCD and all Family Planning Methods
- Only 3% of the mothers are not aware of PPIUCD & all FP Methods.

#### **DESIRED NUMBER OF CHILDREN**

- 92% of the PPIUCD Acceptors desired to have two children
- 4.6 % of them desired to have higher order of births
- 3.5% of them desired to have only one child

# PPIUCD SERVICES, FOLLOW UP SERVICES AND COMPLAINTS:

- Half of them are provided PPIUCD services immediately after delivery within 10 minutes (48.5%).
- One fourth of the PPIUCD services are provided during Post partum period within 48 hours after delivery (24.8%)
- 26.7% of them provide PPIUCD during intra caesarian
- 92.3% of mothers have shown their satisfactory level
- Rest of them (7.7%) are not satisfied with the PPIUCD services provided to them
- Out of the PPIUCD Acceptors, 60.4% mothers attended follow up services for all the three visits namely at 15<sup>th</sup> day, 45<sup>th</sup> day and 3<sup>rd</sup> month
- 22.1% of them attended 1<sup>st</sup> visit at 15<sup>th</sup> day after the PPIUCD insertion made to them
- 27.3% of them attended 1<sup>st</sup> and 2<sup>nd</sup> visits namely 15<sup>th</sup> day and 45<sup>th</sup> day respectively
- 54% of mothers did not turned up to for follow up services after accepting PPIUCD.
- 37.6% of the mothers had complaints after PPIUCD insertions made to them
- Complaints are bleeding-38%, abdomenpain-39.4%, infection-2.2%, vaginal discharge-4.5%, missing strings-3.4%, both bleeding and abdomenpain-3.4%, abdomen pain with missing string-0.4% and other reasons-8.7%.

# **DENIAL OF PPIUCD SERVICES**

- Out of 1366 mothers surveyed, only 178 of them reported were denied the PPIUCD services which stands 13 %.
- 33.7 % of the total no. of denial of PPIUCD services reported in the survey in the MCH like IOG&KG 30.8%, K.M.C.-1.7% ,RSRM 1.1% in Chennai district
- 19.1% of the total denial of it reported in Tuticorin Medical College Hospital
- 14.6% of them reported in Thirunelveli Medical College Hospital
- Nearly 10% of them reported in each Theni (10.1%) and Salem (9.5%)Medical College Hospitals
- 7.3% of them reported in Annal Gandhi Memorial Medical College Hospital, Trichy
- 5.6% of them reported in Coimbatore Medical College Hospital.
- Consent should be obtained from the delivered mothers prior to insertion of PPIUCD to avoid such a statement of denial of services.

## **RETENTION OF PPIUCD:**

- 1366 mothers were contacted in the field. Among them 1188 mothers have agreed the acceptance of the PPIUCD services, which works out to 87%.
- 178 mothers denied (13%) the PPIUCD services provided to them
- The survey result shows that 28.8% are continued PPIUCD at the time of survey.
- 50.7% of them removed PPIUCD due to various reasons
- 20.5% of them reported as expulsion of PPIUCD at the time of survey.
- Nearly 50% of them continued PPIUCD up to one year
- Only 22% of mothers are continued PPIUCD up to 2 years.

#### **CONCLUSION**:

- The Services of RMNCH counselors should be utilized to create awareness of all the Contraceptive Methods available including PPIUCD to the eligible mothers during ANC clinic.
- RMNCH counselors should motivate and counsel all Ante natal, Post natal mothers to accept any one of the FP Methods including PPIUCD for contraception.
- Consent from the mothers should be obtained prior to insert PPIUCD in all the institutions.
- To improve the continuation rate of PPIUCD, all the mothers should be followed up.
- PPIUCD insertion will improve the mother and child Health Status and it should be guaranteed through Motivation and counseling by medical and Para medical staff.

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# LIST OF TABLES TO KNOW USE EFFECTIVENESS OF PPIUCD ACCEPTOR & RETENTION OF PPIUCD IN TAMILNADU

Table No.: 1
Age group wise PPIUCD Acceptors

Age Group	Number	%
15 - 19	47	4.0
20 - 24	699	58.8
25 - 29	363	30.6
30 - 34	61	5.1
35 - 39	16	1.3
40 - 44	2	0.2
Total	1188	100.0

TableNo.2
No. of Living Children wise PPIUCD Acceptors

Living Children.	Number	%
1	853	71.8
2	301	25.3
3	28	2.4
4 and above	6	0.5
Total	1188	100.0

Table No.: 3
PPIUCD Acceptors by Religion

Religion	Number	%
Hindu	1071	90.2
Muslim	70	5.8
Christian	47	4.0
Total	1188	100.0

Table No.:4
Educational Status of PPIUCD Acceptors

Literacy level	Number	%
illiterate	45	3.8
Up to 5th Std.	184	15.5
Up to 8th Std.	329	27.7
Up to 9th Std.	125	10.5
SSLC/ Plus two Std	425	35.8
Degree	69	5.8
Diploma	11	0.9
Total	1188	100.0

Table No.:5
Educational Status of Spouse of the PPIUCD Acceptors

Literacy level	Number	%
illiterate	47	4.0
Up to 5th Std.	162	13.6
Up to 8th Std.	277	23.3
Up to 9th Std.	151	12.7
SSLC/ Plus two Std.	446	37.5
Degree	81	6.8
Diploma	23	1.9
Certificate course	1	0.1
Total	1188	100.0

Table No: 6
Poverty line of the Acceptors by residence

Poverty	RURAL	URBAN	TOTAL	%
BPL	339	299	638	53.7
APL	157	393	550	46.3
Total	496	692	1188	100.0

Note: BPL: Annual income up to Rs16,000 for Rural and Annual income upto Rs. 24,000 for Urban.

Table No.:7
Distribution of PPIUCD acceptors by Occupation

Type of occupation	Number	%
House wife	951	80
Cooly	208	17.5
Salaried-Pvt.	6	0.5
Salaried-Govt.	1	0.1
Weaver	2	0.1
Nurse	2	0.1
Agriculture labour	1	0.1
Tailor	3	0.3
Teacher	3	0.3
Other profession	11	1.0
Total	1188	100.0

Table No. 8.

Distribution of Occupation of Spouse of the PPIUCD Acceptors

Type of occupation	Number	%
Cooly/Labour	861	72.6
Salaried-Pvt.	137	11.6
Contractor	5	0.4
Driver	44	3.7
Operator	4	0.3
Agriculture labour	19	1.6
Tailor	9	0.8
Watchman	3	0.2
Carpenter	8	0.7
Painter	9	0.8
Electrician	10	0.8
Plumber	3	0.2
Barber/Dhobi	3	0.2
Weaver	6	0.5
Masson	3	0.2
Bank	1	0.1
Other professional	63	5.3
Total	1188	100.0

Table No.: 9

Distribution of PPIUCD Acceptors by Interval

PPIUCD inserted after delivery	Number	%
Less than 10 minutes after delivery	576	48.5
Within 48 hours after delivery	295	24.8
Intra Caesarian	317	26.7
Total	1188	100.0

Table No.10
Satisfactory with PPIUCD Service provided

Satisfaction level	Number	%
YES	1097	92.3
NO	91	7.7
Total	1188	100.0

Table No.11

Complication after PPIUCD acceptance

Complication	Number	%
YES	447	37.6
NO	741	62.4
Total	1188	100.0

Table No.12

Nature of Complication after accepting PPIUCD

Nature of Complication	Number	%
Bleeding	170	38.0
Abdomen pain	176	39.4
Infection	10	2.2
Vaginal discharge	20	4.5
Missing strings	15	3.4
Bleeding& abdomen pain	15	3.4
Abdomen Pain & missing strings	2	0.4
Other reasons	39	8.7
Total	447	100.0

Table No. 13

PPIUCD Removal / Expulsion by Intention

Reasons for PPIUCD Removal	Number	%
Want of child	373	44.1
Adopted other temporary method	27	3.2
Adopted terminal method	81	9.6
To adopt other temporary method	94	11.1
To adopt terminal method	47	5.5
Other reasons	224	26.5
Total	846	100.0

Table No: 14

Distribution of removal/expulsion cases by instruments used

Type of instruments	Number	%
Kelly Placental Forceps	662	78.2
Sponge holding forceps	170	20.1
Other vaginal tractor	14	1.7
Total	846	100.0

Table No: 15

Distribution of PPIUCD Acceptors by inserter

Inserter	Number	%
Doctor	1135	95.5
LHV	9	0.8
Staff nurse	14	1.2
ANM	30	2.5
Total	1188	100.0

Table No: 16

Distribution of PPIUCD Acceptor by Motivator

Motivator	Number	%
Doctor	818	68.9
RMNCH counselor	132	11.1
Staff nurse	77	6.5
SHN/HV	41	3.5
VHN	41	3.5
ANM	71	5.9
SELF	7	0.5
Relatives	1	0.1
Total	1188	100.0

Table No: 17
Follow up services attended by the PPIUCD Acceptors

Details	Number	%
Attended first visit at15th day	263	22.1
Attended first and second visit at 15 <sup>th</sup> day and 45 <sup>th</sup> day	324	27.3
Attended all the 3 visits	717	60.4
Not attended all the 3 visits	642	54.0
Total number of Acceptors	118	38

Table No: 18.

PPIUCD Acceptors by current status

Status of PPIUCD insertion	Number	%
Retained	342	28.8
Removed	602	50.7
Expelled	244	20.5
Total	1188	100.0

Table: 19

Break up details for PPIUCD insertion services

Details	Number	%
Accepted	1188	87.0
Denial of services	178	13.0
Total	1366	100.0

Table No.20

Retention of PPIUCD by age of acceptors and period of Retention

Age of	Total	Number Acceptors Retained PPIUCD					
PPIUCD PPIUCD acceptors	below one month	up to 3 months	up to 6 months	up to 12 months	up to 24 months	up to 36 months and above	
Below 30 Years	1109	1000	875	701	537	236	0
30 years & above	79	70	60	55	48	24	0
By all ages	1188	1070	935	756	585	260	0
		90.1%	78.7%	63.6%	49.2%	21.9%	-

Table No.21

Distribution of PPIUCD Acceptors by desired no. of children

Desired number of Children	Number of PPIUCD Acceptors	%
1	42	3.5
2	1091	91.9
3	47	4.0
4	7	0.5
6	1	0.1
Total	1188	100.0

Table No. 22

Distribution of PPIUCD Acceptors by awareness of PPIUCD and FP Method

Awareness	Number of PPIUCD Acceptors	%		
PPIUCD & all FP Methods	120	10.1		
Tubectomy	1106	93.1		
Laparoscopic	683	57.5		
Mini Lap.	219	18.4		
LSCS with Sterilization	639	53.8		
MTP with TAT	401	33.8		
MTP with MVA	145	12.2		
NSV	404	34.0		
Oral Pills	827	69.6		
E.C.Pills	216	18.2		
Nirodh	819	68.9		
No Awareness of all methods	36	3.0		
Total No. of PPIUCD Acceptors : 1188				

Table No. 23

Distribution of PPIUCD Denial Services by Mothers

S.No.	Name of the MCH	Number of mothers	%
1	R.S.R.M. Chennai	2	1.1
2	K.M.C. Chennai	3	1.7
3	I.O.G. Chennai	55	30.8
4	Salem	17	9.5
5	Coimbatore	10	5.6
6	Tirunelveli	26	14.6
7	AGM, Thiruchichirapalli	13	7.3
8	Tuticorin	34	19.1
9	Theni	18	10.1
	Total	178	100.0

Table No.24

Distribution of PPIUCD Survey by Districts

		PPIUCD		Perc	Percentage of		
SI. No.	Districts	Sample size	Total surveyed	Denial service	Accepted	Denial of service	Acceptance
1	Chennai	540	540	60	480	11.1	88.9
2	Madurai	63	63	0	63	0.0	100.0
3	Thanjavur	64	64	0	64	0.0	100.0
4	Dharmapuri	17	17	0	17	0.0	100.0
5	Salem	90	90	17	73	18.9	81.1
6	Kanniyakumari	2	2	0	2	0.0	100.0
7	Coimbatore	205	205	10	195	4.9	95.1
8	Vellore	20	20	0	20	0.0	100.0
9	Tirunelveli	142	142	26	116	18.3	81.7
10	Trichy	15	15	13	2	86.7	13.3
11	Tuticorin	68	68	34	34	50.0	50.0
12	Kancheepuram	77	77	0	77	0.0	100.0
13	Theni	20	20	18	2	90.0	10.0
14	Thiruvarur	43	43	0	43	0.0	100.0
		1366	1366	178	1188	13.0	87.0

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