
“Utilization And Predictors Of Family Planning Services In Rural Community Of Saifai Block Of Etawah District Of Up”

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Abstract:

Background:

Everyone has the right to decide on the number and timing of children without any discrimination. Deficient or incorrect family planning methods, wrong attitude and behaviour toward the methods and consequent unplanned pregnancies, increased maternal and infant mortality rates are the main health problems in most countries. Individuals, learning modern family planning methods and having positive attitude for these methods may increase the usage of these methods and contributes the formation of healthy communities. It is estimated that up to one-third of maternal deaths can be prevented by using contraception in women who are seeking to postpone or delay postpartum.

Materials and methods:

Cross sectional study was conducted to find out the prevalence of contraception (Modern and Natural) and to assess the utilization and predictors of family planning services in rural communities of Saifai block of Etawah district of UP. Data was collected using structured questionnaire. Study subjects were selected by using multistage random sampling. χ^2 test was used to find out the predictors of utilization of the family planning services.

Results: Prevalence of contraception was 90%, out of 90% users 55% were using modern contraceptive methods and remaining 45% were using natural methods. Prevalence of modern contraception methods was 50%. Prevalence of natural contraception methods was 40%. Most common modern methods followed by the eligible couples were male condoms (39%) and Chhaya pills (36%). The most common natural methods followed were the calendar methods (43%) and withdrawal method (40%). Occupation of Husband, Occupation of women, No. of living children, and abortion was found to be significantly associated with utilization of family planning method

Key words: Family Planning methods, utilization.

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I. Introduction

Everyone has the right to decide on the number and timing of children without any discrimination. Deficient or incorrect family planning methods, wrong attitude and behaviour toward the methods and consequent unplanned pregnancies, increased maternal and infant mortality rates are the main health problems in most countries¹.

Individuals, learning modern family planning methods and having positive attitude for these methods may increase the usage of these methods and contributes the formation of healthy communities². More than 22 million unsafe abortions that occur every year cause about 47000 maternal deaths in the short or long term, mostly in developing countries³. It is estimated that up to one-third of maternal deaths can be prevented by using contraception in women who are seeking to postpone or delay postpartum⁴.

Across the world, it is estimated that 222 million women have unmet need for family planning⁵. Increasing usage of contraceptives in some developing countries has reduced the annual number of maternal deaths by 40% in the last 20 years and has reduced the maternal mortality rate (the number of maternal deaths in 100,000 live births) by 26% in recent years.

Unmet need for family planning is a concept that has come to the agenda in recent years. Unmet need for family planning refers to women who have the ability to give birth before they have another child (want to increase the interval of births) or who do not want to have any other children (want to terminate their fertility)

but do not use any contraceptive methods. Unmet need for contraception and unwanted pregnancy is a major public health problem in most countries.

II. Material and methods

The study was conducted at selected villages of Saifai block of Etawah district, Uttar Pradesh in Feb & March 2021. The data was collected from the eligible couple from selected villages of Etawah district. 336 eligible couples were selected by multistage sampling.

Study Design: Community based cross sectional research design

Study Location: Saifai Block of Etawah District, Uttar Pradesh.

Study Duration: Feb and March 2021.

Sample size: 336

Sample size calculation:

$$n = Z_{1-\alpha/2}^2 P (1-P) / d^2$$

P= proportion of peoples who had used any of the contraceptive method.

P value was taken from NFHS-4 (2015-2016), according to NFHS-4 (2015-16), in Etawah District 53.5% peoples had used any of the contraceptive method.

$$1-P = 1 - 0.535 = 0.465, d = 0.05$$

$$\text{Sample size (n)} = \frac{1.96 \times 0.535 \times 0.465}{0.0025} = 195$$

$$195 + 10\% \text{ non-response rate} = 215$$

Design effect: to minimize the risk of under sampling the design effect of 1.5 imposed to calculate sample size.
 $215 \times 1.5 = 322.5 = 323$

Subjects and selection methods:

Multistage sampling was adopted. In the first stage 14 Panchayats were selected randomly from Saifai Block in second stage from each Panchayat 1 village was elected randomly. In the third stage total of 336 Mothers were be selected from 14 villages by systematic random sampling. For study purpose List of eligible couples was collected from ANM, ASHAs and AWWs.

Inclusion criteria:

- Eligible couple age group (18-49 year) from selected rural areas of Etawah district.

Exclusion criteria:

- Migrant people

Procedure methodology: After taking informed consent, a structured questionnaire on family planning was used to collect the data from the eligible couples. The questionnaire had the three sections first section included Demographic characteristics such as age, age at marriage, duration of marriage, educational qualification of women and her husband, religion, social class, occupation of woman and husband, BPL status, and family structure and second sections included Reproductive factors such as no of children, Future intention for child, Period when mothers wanted to give birth to the next child, parity and abortion. And the third section included the information for the utilization of family planning services like family counselling, use of family planning methods, type of method used, frequency of use of family planning methods, duration of use of any family planning method, Partner's approval for the use of modern contraception, Way of partner involvement, and person responsible for making decision on the use of family planning methods.

Statistical analysis:

Data was analyzed using SPSS 22. Chi-square test, was used to find out the significant association between independent and dependent variables. The level $P < 0.05$ was considered as the level of significance. Data was organized and tabulated the data was presented in the form of figures and tables.

III. Results

TABLE- 1
Frequency and percentage distribution of demographic characteristics of study subjects

N=336

Demographic characteristics		Frequency	Percentage
Age of women (In years)	18-29	219	72.03
	30-39	77	25.32
	40-49	8	2.63
Age at marriage	<20	83	27.3
	20-24	181	59.53
	25-29	39	12.82
	>30	1	0.32
Duration of marriage	<1 yr	5	1.64
	1-5 yrs	182	59.86
	6-10 yrs	62	20.39
	11-15 yrs	28	9.21
	>15 yrs	27	8.88
Education of women	Illiterate	53	17.43
	1 ⁰ Education (1-8)	63	20.72
	2 ⁰ Education (9-12)	116	38.15
	UG	64	21.05
	PG	8	2.63
Education of husband	Illiterate	9	2.96
	1 ⁰ Education	16	5.26
	2 ⁰ Education	139	45.72
	UG	133	43.75
	PG	7	2.3
Religion	Hindu	254	83.55
	Muslim	37	12.17
	Christian	4	1.31
	Other	9	2.96
Social class	SC	40	13.15
	ST	32	10.52
	OBC	192	63.15
	General	40	13.15
Occupation of women	Self-employed	20	6.57
	Daily wager	13	4.27
	Salaried worker	22	7.23
	House wife	249	81.9
Occupation of Husband	Self-employed,	160	52.63
	Daily wager	31	10.19
	Salaried worker	107	35.19
	Not working	6	1.97
BPL Status (BPL)	Yes	164	53.94
	No	140	46.05
Family income	Rs 4000 or below	29	9.53
	Rs 4001-6000	58	19.07
	Rs 6001-8000	66	21.71
	Rs 8000 above	151	49.67
Family Structure	Nuclear	137	45.06
	Joint	152	50
	Extended	15	4.93

Table 1 shows that majority of the women i.e., 72% were in the age group 18 to 29 years. Age at marriage was 20-24 years in 60% of the women. Duration of marriage was 1-5 years in 59.86 of the women. 38.15 had the secondary level of education followed by 20.72 who had primary education. 45.72 % of the husbands of the women had primary education followed by 43% who had secondary level of education. Majority of the women i.e., 83.55% were the Hindus followed by 12.17% of the Muslim women. Majority of the women i.e., 63.15% were from the OBC category. Most of the women i.e., 81.9 were housewives. 52.63% of the husbands were self-employed followed by salaried worker i.e., 35.19%. 53.94% of the women were above BPL. Approximately in 50% of the women family income was more than 8000 Rs. Majority of the women i.e., 45% were having nuclear family.

TABLE- 2
Frequency and percentage distribution of reproductive factors of study subjects

N=336

Demographic variable	Frequency	Percentage
No of living children	0	23
	1	92
	2	93
	3	58
	4	26
	5	10
	6	2
Future intention for child	Wanted to have another child	152
	Not wanted to have another child	125
	Not decided or do not know	27
Period when mothers wanted to give birth to the next child	Not wanted to have another child	57
	No plan	65
	≤1 yr	29
	1 - 2 yrs	78
	2 - 3 yrs	48
	3 - 4 yrs	20
	5 yrs and above	7
Received family planning counselling	Yes	121
	No	183
Use of media	Yes	217
	No	87
Parity	0	23
	1	94
	2	92
	3	66
	4	15
	5	12
	6	2
Abortion	0	251
	1	48
	2	5

The table 2 shows that 30% of the women had 1 and another 30% of the women had 2 children. 50% of the women wanted to have another child. 25.65% of the mothers wanted to give birth to another child after 1-2 years. Only 39.8% received counselling on family planning. Majority i. e. 71.38% of the women were having exposure to media. 30.92% had parity one and 30.26% had parity 2. 15.78% of the women had one abortion and 1.64% had two abortions.

TABLE- 3
Chi-square showing relationship between utilization of Family Planning and selected demographic characteristics

N=336

Demographic characteristics		Utilization	Non-Utilization	Chi Square	Significance
Age of women (In years)	18-29	219	18	3.57	No
	30-39	77	13		
	40-49	8	1		
Age at marriage	<20	83	10	0.324	No
	20-24	181	18		
	25-29	39	4		
	>30	1	0		
Duration of marriage	<1 yr	5	1	5.739	No
	1-5 yrs	182	16		
	6-10 yrs	62	4		
	11-15 yrs	28	6		
	>15 yrs	27	5		
Education of women	Illiterate	53	5	1.160	No
	1 ⁰ Education (1-8)	63	8		
	2 ⁰ Education (9-12)	116	12		
	UG	64	7		
	PG	8	0		
Education of husband	Illiterate	9	1	2.507	No
	1 ⁰ Education	16	4		
	2 ⁰ Education	139	15		
	UG	133	11		
	PG	7	1		
Religion	Hindu	254	24	3.922	No
	Muslim	37	7		
	Christian	4	1		
	Other	9	0		
Social class	SC	40	5	2.619	No
	ST	32	4		
	OBC	192	16		
	Other	40	7		
Occupation of women	Self-employed	20	3	10.849	Yes
	Daily wager	13	2		
	Salaried worker	22	1		
	House wife	249	25		
Occupation of Husband	Self-employed	160	24	11.104	Yes
	Daily wager	31	5		
	Salaried worker	107	2		
	Not working	6	1		
BPL Status (BPL)	Yes	164	20	0.855	No
	No	140	12		
Family income	Rs 4000 or below	29	7	6.698	No
	Rs 4001-6000	58	6		
	Rs 6001-8000	66	9		
	Rs 8000 above	151	10		
Family Structure	Nuclear	137	13	3.116	No
	Joint	152	15		
	Extended	15	4		

The table-3 shows the chi square values to establish the relationship between contraception use and selected demographic characteristics. There was found significant association between contraception use and socioeconomic factors like occupation of husband and women.

TABLE-4
Chi-square showing relationship between utilization of Family Planning services and selected Reproductive and obstetric factors

N=336

Demographic variable		Utilization	Non utilization	Chi-square	Significant
No of living children	0	23	3	17.43	Yes
	1	92	6		
	2	93	11		
	3	58	5		
	4	26	2		
	5	10	2		
	6	2	3		
Future intention for child	Want to have another child	152	13	3.22	No
	Not want to have another child	125	18		
	Not decided or do not know	27	1		
Period when mothers wanted to give birth to the next child	Not want to have another child	57	8	10.87	No
	No plan	65	11		
	≤1 yr	29	1		
	1 - 2 yrs	78	2		
	2 - 3 yrs	48	8		
	3 - 4 yrs	20	2		
	5 yrs and above	7	0		
Received family planning counselling	Yes	121	8	2.68	No
	No	183	24		
Use of media	Yes	217	18	3.15	No
	No	87	14		
Parity	0	23	3	12.77	No
	1	94	7		
	2	92	13		
	3	66	3		
	4	15	3		
	5	12	1		
	6	2	2		
Abortion	0	251	21	14.41	Yes
	1	48	7		
	2	5	4		

Table-4 shows the chi square values to establish the relationship between family planning utilization and selected reproductive variables. There was found significant association between contraception use and obstetric factors like number of living children and abortion.

Table 5
Percentage distribution of population for utilization pattern of family planning by eligible couples

		Frequency	Percentage	
Eligible couples who used any of the family planning method	Yes	304	90	
	No	32	10	
Method used	Natural	136	45	
	Modern	168	55	
Type of Natural method used	Withdrawal method	54	40	
	Calendar method	58	43	
	Lactation amenorrhoea method	10	7	
	Temperature method	14	10	
Type of modern method used	Depo Provera	5	3	
	Male condom (Nirodh)	65	39	
	Pills (Chhaya)	60	36	
	Male sterilization	0	0	
	Female sterilization	10	5	
	Implants	4	2	
	Injectable (Antara)	16	10	
	IUCD(Cu-T)	8	5	
	Frequency of use of any family planning method	Consistent	151	50
		When affordable	72	24

	If I remember	38	12
	If partner permits	43	14
Duration of use of any method of family planning	< 1 yrs	49	16
	1 -5 yrs	189	62
	5-10 yrs	41	14
	10-15 yrs	22	7
	>15 yrs	2	1
Partner’s approval for the use of modern contraception	Yes	120	40
	No	184	60
Discussion with partner on the use of FP	Yes	228	75
	No	76	25
Way of partner involvement	By reminding appointment day	105	35
	By bringing contraception	58	19
	By reminding time of use	70	23
	By using by himself	70	23
Responsible for decision making on the use of FP	1. Partner only	125	41
	Women only	15	5
	Women & partner jointly	164	54

Table 5 shows that 90 % of the eligible couples were using family planning methods. Out of all the users 55% were using modern methods of contraception and 45% were using natural methods of contraception. In natural methods the most commonly used method was calendar method used by 43% of the eligible couples followed by withdrawal method used by 40% of the eligible couples. In modern methods of contraception, the most commonly used method was condom i.e., 39% followed by Chhaya pills i.e., 36%. 50% of the couples were using family planning methods consistently. 62% of the couples used family planning methods for 1 to 5 years. 60 % of the female used modern contraception without approval of the partner. 75% of the women discussed with their partners on the use of contraception, 35% of the partners reminded woman on the appointment day, followed by reminding the time of use i.e., 23%. In 54% women and partner both were responsible for taking decision on the use of contraception.

Utilization pattern of family planning methods.

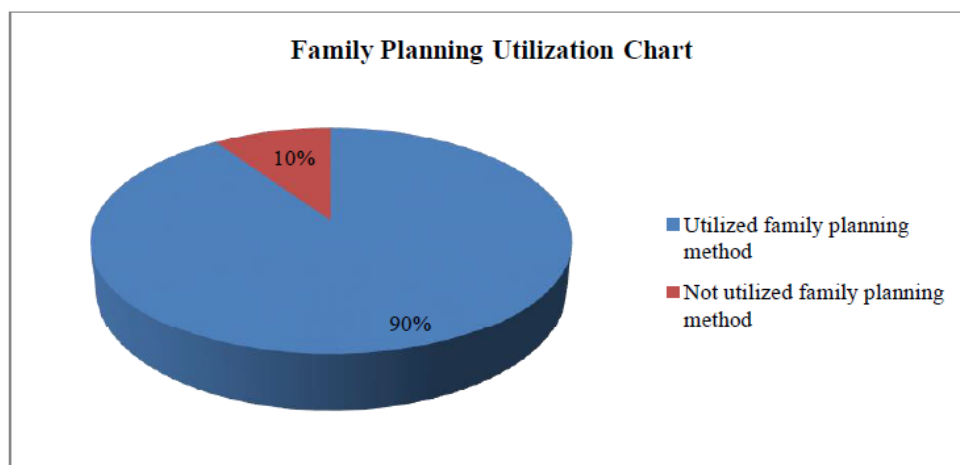


Figure-1: Pie chart showing utilization of family planning methods by eligible couple

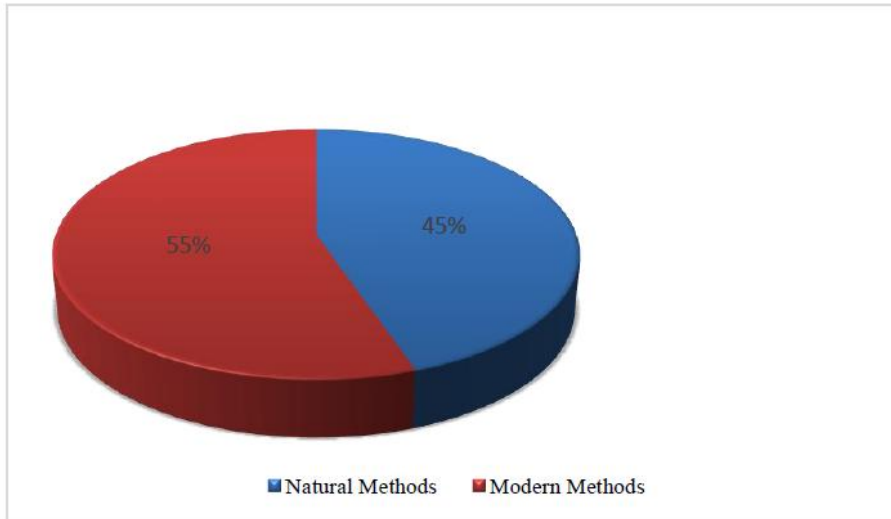


Figure-2: Pie chart showing percentage distribution of natural and modern methods of family planning

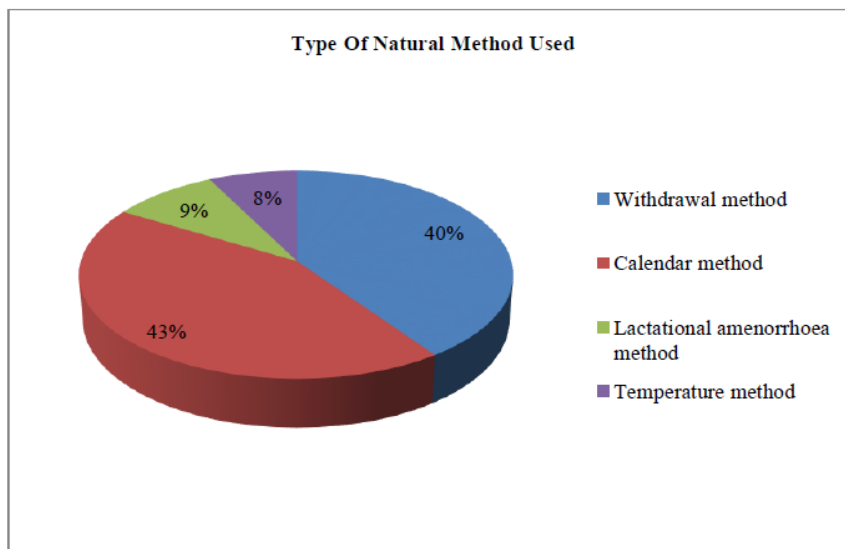


Figure-3: Pie chart showing percentage distribution of natural methods of family planning used by eligible couples

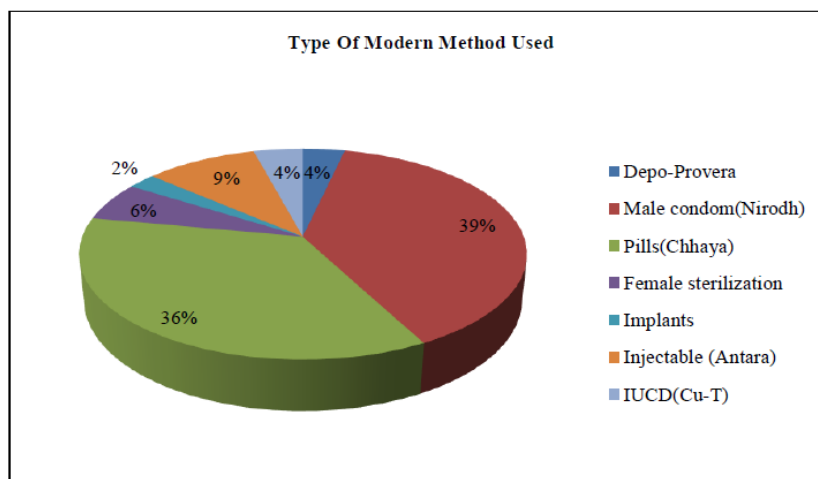


Figure-4: Pie chart showing percentage distribution of modern methods of family planning used by eligible couples

IV. Discussion

The findings of the study revealed that 90 % of the women used family planning methods including both natural and modern methods of family planning. The prevalence rate for the modern contraception for the current study is 50% which is approximately equal to the studies reported by the NFHS 4 and Patel AA. For the current study there was found significant association between contraception use and number of living children This finding was consistent with study conducted by Gupta et al., Sahni et al, and Hussain MB et al. There was found no significant association between contraception use and age at marriage this finding of the study is consistent with the study conducted by Gupta et al.

V. Conclusion

- Prevalence of contraception was 90%, out of 90% users 55% were using modern contraceptive methods and remaining 45% were using natural methods.
- Prevalence of modern contraception methods was 50%.
- Prevalence of natural contraception methods was 40%.
- Most common modern methods followed by the eligible couples were male condoms (39%) and Chhaya pills (36%).
- The most common natural methods followed were the calendar methods (43%) and withdrawal method (40%).
- Occupation of Husband, Occupation of women, No. of living children, and abortion was found to be significantly associated with utilization of family planning method.

References

- [1]. Agarwal, S.N. (1977). India's population problems, 2nd Ed., Tata Mc Graw Hill.
- [2]. Ahman E, Shah IH. New estimates and trends regarding unsafe abortion mortality. International Journal of Gynaecology and Obstetrics. 2011; 115:121-126. DOI: 10.1016/j.ijgo.2011.05.027. PMID: 21885049
- [3]. Ahmed Maternal deaths averted by contraceptive use: An analysis of 172 countries. Lancet. 2012; 380:111-125. DOI: 10.1016/S0140-6736(12)60478-4. PMID: 22784531
- [4]. Akgun S, Bakar C. Uremic epidemiology Turkish Journal of Obstetrics and Gynaecology. 2006; 3:9-18
- [5]. Anil A P. Knowledge and practices of contraception among married females of rural Tamil Nadu Asian J Biomed Pharm Sci. 2015; 5:1-4
- [6]. Campbell M, Cleland J, Ezech A, Prata N. Return of the population growth factor. Science. 2007; 315:1501-2.
- [7]. Cayan A. 15-49 Aydin: Adnan Menderes University Health Sciences Institute; 200
- [8]. Gakidou E, Vayena E. Use of Modern Contraception by the poor is falling behind. PLoS Med. 2007; 4(2): e31.
- [9]. Govt. of India (2001). Annual Report 1990-2000, Ministry of Health and family welfare, New Delhi.
- [10]. Gupta RK, Singh P, Gupta R, Akhtar N, Gupta C, Sharma P. Contraceptive use: Its prevalence, awareness, practices and determinants in a rural population of Northern India. Int J Med Sci Public Health 2017;6(10):1543-1547.
- [11]. <http://planningcommission.nic.in/plans/planrel/fiveyr/9th/vol2/v2c3-5.html>
- [12]. Kharabe Mrunal. Research Methodology. Health and Medicine. Dec 6 2017. Available From: <https://www.slideshare.net/santoshmirje2/research-methodology-83452193>.
- [13]. Nattabi B, Li J, Thompson SC, Orach CG, Eamest J. Family planning among people living with HIV in post-conflict northern Uganda: A mixed methods study. confl Health. 2011; 5:18 Biomed Central.
- [14]. Polit and Beck Tetano Cheryl. Nursing Research: Generating and assessing evidence for nurses practice 9th edition. New Delhi: Wolters Kluwer (India) pvt. Ltd; 141.
- [15]. Research setting [internet]. 2012 [cited 2013 Jan 26]. Available from http://psychology.Wikia.com/wiki/research_setting.
- [16]. Semachew KasaAyele, Tarekegn Mulu and Embiale Nebyat. Knowledge, attitude and practice towards family planning among reproductive age women in a resource limited setting of Northwest Ethiopia. BMC Res Notes (2018) 11:577.
- [17]. Singh S, Darroch J, Ashford L, Vlassoff M. "Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health". Guttmacher Institute and UNFPA. 2010.
- [18]. Sushila S, Jacqueline D. Adding It Up: Costs and Benefits of Family Planning Services. Guttmacher Institute: New York; 2012
- [19]. WHO (1971). Techn. Rep. Ser., No. 476.
- [20]. WHO (1971). Techn. Rep. Ser., No. 483.
- [21]. Yadav D (2012) A study of synergies between maternal- child health and family planning services utilization in rural Uttar Pradesh. Mumbai: International Institute for population science. 16. Bhavna Sahni, Shalini Sobti, Vridhee Sharma, DS Jamwal. "A study of utilization and determinants of family welfare services in rural Jammu". Journal of Evolution of Medical and Dental Sciences 2013; Vol. 2, Issue 42, October 21; Page: 8006-8012. 36

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