CHAPTER 1

INTRODUCTION

NATIONAL RURAL HEALTH MISSION[1]

The National Rural Health Mission (NRHM) was launched in 2005 with a view to bring about dramatic improvement in the health system and the health status of the people, especially those living in the rural areas of the country. One of the Core Strategies of NRHM in achieving its goals is to strengthen capacities for data collection, assessment and review for evidence based planning, monitoring and supervision. The NRHM Framework proposes accountability through a three pronged approach of internal monitoring (MIS), Community based monitoring and External surveys (SRS, DLHS, and Household Surveys).

NRHM is an umbrella programme encompassing the various health and family welfare Initiatives and programmes of the Ministry of Health & Family Welfare, Government of India. These include the Reproductive and Child Health Programme – Phase II (RCH II), Universal Immunization Programme, and the various National Disease Control Programme. With the launch of NRHM, there was an urgent need for a centralized health information division covering all the programme specific data needs and also routine RCH and public health related information so as to meet all information needs of MOHFW for NRHM and related programmes on a single platform.

Health Management Information System

The HMIS (Health Management Information System) web portal was launched by the Ministry of Health and Family Welfare (MoHFW) on 21st October, 2008 to enable capturing of public health data from both public and private institutions in rural and urban areas across the country. The portal is envisaged as a "Single Window" for all public health data for the Ministry of Health and Family Welfare. The web portal also has data from NFHS, DLHS etc. and will subsequently have data from Concurrent Evaluation and other such surveys as and when the data

is available. Before the launch of the web portal, the NRHM physical performance formats were rationalized and divided in to 5 separate formats, one each for District Hospital, Sub Divisional Hospital, CHC, PHC and HSC and their equivalent health institutions (both public and private). The rationalized formats were then e-enabled in the HMIS web portal that was developed by MoHFW in collaboration with a solution provider, namely, M/s Avaya Technologies Ltd. (formerly "iBilt Technologies Ltd."), selected through a tendering process. The web application would also be maintained by the solution provider.

STATEMENT OF THE PROBLEM and SIGNIFICANCE OF THE STUDY

Background

Since the 1970s, India's economic growth rate has risen, poverty has declined, and social indicators have improved. Nevertheless, over a quarter (28.6%) of India's population currently lives below the national poverty line, and 80% of the entire population lives on less than $2 per day [5]. Twenty-eight percent of the population lives in urban areas. India's social indicators remain weak by most measures of human development, and living standards are still among the poorest in the world. Currently, India's annual population growth rate is 1.74%. India is the second most populous country in the world, contributing about 20% of births worldwide. India's more than one billion people, one-third are under 15 years of age and 50% are of reproductive age.

Family Planning In India:

In 1952, the Indian Government was one of the first in the world to formulate a national family planning programme, which was later expanded to encompass maternal and child health, family welfare, and nutrition. India is committed to promoting a small family norm and supporting population control and development programmes. Since the 8th Five Year Plan (1992-97), the government identified "human development" as its main focus, with health and population stabilization listed as two of six priority objectives.

The small family norm is widely accepted (the mean ideal family size currently reported by young people is 2.5 children) and general awareness of contraception is universal (99% awareness of a contraceptive method). India's TFR declined from six children per woman in the 1960s to just under three children, 2.85, at present. Contraceptive use is generally rising, as illustrated in Figure 2. Nevertheless, much work remains for India's family planning programme. There is a societal preference in India for early marriage soon followed by child-bearing. Marriage is almost universal with little social acceptance of never-married women. Although the average age at marriage for women is 19 years, this conceals regional variations with some states having an average of only 16 years of age. Approximately half of all women have given birth by the time they reach 20 years. However, evidence has emerged indicating that young couples, despite community norms that favour a first child soon after marriage, would prefer delaying the first birth until they have spent more time together.

Three out of four users rely on sterilization in India, overwhelmingly female sterilization. Sterilization accounts for roughly 85% of all modern contraceptive methods used. Although reported by a negligible minority, sterilization is the most common method used even among married adolescents. The central government has banned the use of quinacrine for female sterilization.

The public sector provides five contraceptive methods – female sterilization, male sterilization, the IUD, oral contraceptive pills and condoms. Methods that are perceived as less effective (including pessaries, spermicides, and diaphragms), or are controversial (such as injectables and implants) are dropped from the public programme, simply not introduced, or given low priority by health workers. Most women and men do not have access to a wide choice of contraceptives, particularly those who are dependent on the public sector (76% of current users of modern methods). Inadequate knowledge of contraceptive methods and incomplete or erroneous information about where to obtain methods and how to use them are the main reasons cited for not accepting family planning.

CHAPTER 2

Objectives:

- A study of performance of a high focus (Uttarakhand) and a non-high focus (Kerala) state in rendering family planning services, under NRHM, during the period 2008-09 to 2009-10.

Specific objectives

- To analyze the current status and trends on a host of Family Planning indicators of both the states.

- To compare the year wise performance of the respective states on the basis of analysis of HMIS data available on portal.

CHAPTER 3

Profile of the States:[2]



PROFILE OF THE KERALA

Geography

Kerala is a small state, tucked away in the south west corner of India. It represents only 1.18 percent of the total area of India but has 3.34% of the total population of the country. It is separated from the rest of the peninsula by natural geographic boundaries.

Kerala may be divided into three geographical regions (1) high land (2) mid land (3) low land. The high lands slope down from the Western Ghats, which rise to an average height of 900m, with a number of peaks over 1,800 m in height. This is the area of major plantations like tea, coffee, rubber, cardamom and other species.

The mid land lies between the mountains and the low lands. It is made up of undulating hills and valleys. This is an area of intensive cultivation - cashew, coconut, areca nut, cassava, banana, rice, ginger, pepper, sugarcane and vegetables of different varieties are grown in this area.

The 'Western Ghats' with their rich primeval forests having a high degree of rainfall, form the eastern boundary and extend from the north to Kanyakumari in the south. The entire western border is caressed by the Arabian sea. Between these natural boundaries lies the narrow strip of land extending from Kasarkode in the north to Parasala in the south.

The south-west and north-east monsoons with their accompanying downpour keep the land soaked, for a period of five to six months in a year. The 'western Ghats', which form the eastern ramparts of the state rise from very low altitudes of a few hundred metres upto about 2,000 metre on an average. The 'Anamudi' peak in the high ranges of Kottayam district rises to a height of 3,000 metres and represents the highest point in India, south of Himalayas. 'Agastyakutam' the southern most peak in the Ghats, is 2,044 metres. 'Ezhimala' is a rugged hill jutting into the sea in startling isolation on the Kannur coast. Ghats are served as an effective rampart. The range has many passes which have allowed a controlled interaction between Kerala, and the lands lying beyond the mountains. The 'Peranbadi Ghat' provides access to Coorg, the 'Periyar Ghat' to the Nilgiri district. The Palghat pass, 32 km broad, has played a bigger role in the alarums and

excursions of history. In south, the Bodinaikannur pass connects Devikulam and Munnar in Kerala with the Madurai district of Tamil Nadu. Other passes linking Kerala with Tamil Nadu are Thevaram, the Kambam, the Kumili and the Aramboly

History

Legends speak of Kerala as Parasuramakshetram, 'the land of Parasurama'. The land of Kerala is believed to be a gift of the Arabian Sea. Owing to its favourable location this land fostered trade and established contacts with Egypt, Assyria, Greeks, Romans and the Chinese. The Malayalam era 'Kollavarsha' is believed to have started in the 9th century A.D. During this period of internal strife in Kerala, Cheraman Perumal founded the Chera dynasty (9th century AD). In about 1498 the Portuguese came to Calicut and in 1502 to Kochi. Kerala was then divided into the Kingdoms of Malabar, Kochi and Travancore. In 1776, Malabar was under the rule of Hyder Ali. In 1792 Tipu Sultan ceded it to the British. While Malabar witnessed the direct rule of the British, Travancore and Kochi were princely states owing allegiance to the British. It was in 1949 that the three territories were integrated and in 1956 the state of Kerala was formed, and joined the Indian Union.

The state of Kerala has an area of 38,863 sq. km. and a population of 31.84 million. There are 14 districts, 152 blocks and 1364 villages. The State has population density of 819 per sq. km. (as against the national average of 312). The decadal growth rate of the state is 9.43% (against 21.54% for the country) and the population of the state is growing at a slower rate than the national rate.

HEALTH INDICATORS OF KERALA

The Total Fertility Rate of the State is 1.7. The Infant Mortality Rate is 12 and Maternal Mortality Ratio is 95 (SRS 2004 - 2006) which are lower than the National average. The Sex Ratio in the State is 1058 (as compared to 933 for the country). Comparative figures of major health and demographic indicators are as follows:

Table I: Demographic, Socio-economic and Health profile of Kerala State as compared to India figures

S. No.	Item	Kerala	India
1	Total population (Census 2001) (in million)	31.84	1028.61
2	Decadal Growth (Census 2001) (%)	9.43	21.54
3	Crude Birth Rate (SRS 2008)	14.6	22.8
4	Crude Death Rate (SRS 2008)	6.6	7.4
5	Total Fertility Rate (SRS 2008)	1.7	2.6
6	Infant Mortality Rate (SRS 2008)	12	53
7	Maternal Mortality Ratio (SRS 2004 - 2006)	95	254
8	Sex Ratio (Census 2001)	1058	933
9	Population below Poverty line (%)	12.72	26.10
10	Schedule Caste population (in million)	3.12	166.64
11	Schedule Tribe population (in million)	0.36	84.33
12	Female Literacy Rate (Census 2001) (%)	87.8	53.7

Table II: Health Infrastructure of Kerala

Particulars	Required	In position	Shortfall
Sub-centre	4761	5094	-
Primary Health Centre	791	909	-
Community Health Centre	197	107	90
Multipurpose worker (Female)/ANM at Sub Centres & PHCs	6003	5320	683
Health Worker (Male) MPW(M) at Sub Centres	5094	2654	2440
Health Assistant (Female)/LHV at PHCs	909	740	169
Health Assistant (Male) at PHCs	909	794	115
Doctor at PHCs	909	1732	-
Obstetricians & Gynaecologists at CHCs	107	28	79

Physicians at CHCs	107	31	76
Paediatricians at CHCs	107	38	69
Total specialists at CHCs	428	115	313
Radiographers	107	15	92
Pharmacist	1016	1017	-
Laboratory Technicians	1016	347	669
Nurse/Midwife	1658	3383	-

(Source: RHS Bulletin, March 2008, M/O Health & F.W., GOI)

Table 3 The other Health Institution in the State are detailed as under:

Health Institution	**Number**
Medical College	18
District Hospitals	14
Referral Hospitals	
City Family Welfare Centre	
Rural Dispensaries	
Ayurvedic Hospitals	124
Ayurvedic Dispensaries	740
Unani Hospitals	-
Unani Dispensaries	1
Homeopathic Hospitals	33
Homeopathic Dispensary	580



PROFILE OF THE UTTARAKHAND

Geography

The state is bordering Himachal Pradesh in the north-west and Uttar Pradesh in the South and has international borders with Nepal and China. The state is very rich in natural resources. The famous peaks of Nanda Devi, Kedarnath, Trishul, Bandarpunch and Mt Kamet, the major Glaciers including Gangotri, Pindari, Milam and Khatling are located in Uttarakhand. The

Ganga, the Yamuna, Ramganga and Sharda are principal rivers of this region. The state of Uttarakhand is looking after twelve major ecological areas of the country. These include Nanda Devi National Park, the Valley of Flowers, Gangotri, Govind and the Rajaji National Parks, Kedarnath, Mussoorie, Binsar ,Sanadi, Govind and the Ascod Sanctuaries. All these areas support many rare plants and animal communities.

Administration

Uttarakhand is the 27th state of the Republic of India and was carved out of Uttar Pradesh on 9th Nov 2000. The State has two Divisions (viz; Garhwal and Kumaun), with 13 Districts, which can be grouped into three distinct geographical regions, the High mountain region, the Mid-mountain region and the Terai region. Dehradun is the interim-capital city. Uttaranchal consists of 13 districts viz., Almora, Pauri Garhwal, Tehri Garhwal, Bageshwar, Chamoli, Haridwar, Champawat, Nainital, Dehradun, Udham Singh Nagar, Uttarkashi, Pithoragarh, Rudraprayag. The state is spread over an area of 55,845 square km having 78 Tehsils, 95 blocks and 7227 Panchayats. The state has a total of 16,826 inhabitated villages, 86 cities/towns and only five are major cities with population over 1 lakh. It has 5 Lok Sabha, 3 Rajya Sabha constituencies and 70 Vidhan Sabha constituencies.

Demography

The state has a population of 8.5 million with average density of 159 persons per sq km which varies from as high as 612 in Haridwar and 414 in Dehradun districts to as low as 37 in Uttarkashi and 48 in Chamoli. 89 % of the villages have population less than 500. 93% of the area of the state is hilly and 63% of the land is covered with forests.

State Capital

The city of Dehradun, is situated at the Himalayan foothills in the fertile Doon Valley. The valley is well known for its salubrious climate and natural beauty. It is due to this reason, Dehradun has been one of the favorite residential cities. It is also an important educational centre of the country. Some of the best public schools and convents are housed here. The Indian

Military Academy, Lal Bahadur Shastri Academy of Administration and The Forest Research Institute are also situated here.

The state of Uttarakhand has an area of 53483 sq. km. and a population of 8.5 million. There are 13 districts, 95 blocks and 16826 villages. The State has population density of 158 per sq. km. (as against the national average of 312). The decadal growth rate of the state is NA (against 21.54% for the country) and the population of the state continues to grow at a much lower rate than the national rate.

HEALTH INDICATORS OF UTTARAKHAND

The Total Fertility Rate of the State is NA. The Infant Mortality Rate is 44 and Maternal Mortality Ratio is 440 (SRS 2004 - 2006) which are higher than the National average. The Sex Ratio in the State is 962 (as compared to 933 for the country). Comparative figures of major health and demographic indicators are as follows :

Table 4: Demographic, Socio-economic and Health profile of Uttarakhand State as compared to India figures

S. No.	Item	Uttarakhand	India
1	Total population (Census 2001) (in million)	8.5	1028.61
2	Decadal Growth (Census 2001) (%)	NA	21.54
3	Crude Birth Rate (SRS 2008)	20.1	22.8
4	Crude Death Rate (SRS 2008)	6.4	7.4
5	Total Fertility Rate (SRS 2008)	NA	2.6
6	Infant Mortality Rate (SRS 2008)	44	53
7	Maternal Mortality Ratio (SRS 2004 - 2006)	440	254
8	Sex Ratio (Census 2001)	962	933
9	Population below Poverty line (%)	-	26.10

10	Schedule Caste population (in million)	1.52	166.64
11	Schedule Tribe population (in million)	0.26	84.33
12	Female Literacy Rate (Census 2001) (%)	59.6	53.7

Table 5: Health Infrastructure of Uttarakhand

Particulars	**Required**	**In position**	**Shortfall**
Sub-centre	1294	1765	-
Primary Health Centre	214	239	-
Community Health Centre	53	55	-
Multipurpose worker (Female)/ANM at Sub Centres & PHCs	2004	1903	101
Health Worker (Male) MPW(M) at Sub Centres	1765	616	1149
Health Assistant (Female)/LHV at PHCs	239	340	-
Health Assistant (Male) at PHCs	239	417	-
Doctor at PHCs	239	866	-
Obstetricians & Gynaecologists at CHCs	55	30	25
Physicians at CHCs	55	4	51
Paediatricians at CHCs	55	18	37
Total specialists at CHCs	220	67	153
Radiographers	55	30	25
Pharmacist	294	294	0
Laboratory Technicians	294	132	162
Nurse/Midwife	624	292	332

(Source: RHS Bulletin, March 2008, M/O Health & F.W., GOI)

Table 6 The other Health Institution in the State are detailed as under:

Health Institution	**Number**
Medical College	3
District Hospitals	18
Referral Hospitals	
City Family Welfare Centre	
Rural Dispensaries	
Ayurvedic Hospitals	7
Ayurvedic Dispensaries	467
Unani Hospitals	2
Unani Dispensaries	3
Homeopathic Hospitals	1
Homeopathic Dispensary	60

CHAPTER 4

Research Methodology:

HMIS Indicators

Conventionally, information flows from various Health Institutions and gets aggregated at various levels like the Block, District Headquarters, State Headquarters and finally at the national level. Each level of data aggregation leads to delays in the flow of information and as a result of which critical reports and analysis gets delayed. This information needs to be processed quickly and automatically in order to generate indicators to analyse the relative performance for the various health interventions. It was also observed that a large amount of time was spent on

Category	Sub-category	States
High Focus	North East (8)	Arunachal Pradesh (ArP), Assam (AS), Manipur (MN), Meghalaya (MG), Mizoram (MZ), Nagaland (NG), Sikkim (SK), Tripura (TR)
	Non-North East (10)	Bihar (BH), Chhattisgarh (CG), Himachal Pradesh (HP), Jammu & Kashmir (JK), Jharkhand (JH), Madhya Pradesh (MP), Orissa (OR), Rajasthan (RJ), Uttar Pradesh (UP),Uttarakhand (UK),
Non-High Focus	Large (10)	Andhra Pradesh (AP), Goa (GO), Gujarat (GJ),Haryana (HR), Karnataka (KN), Kerala (KR), Maharashtra (MH), Punjab (PB), Tamil Nadu (TN), West Bengal (WB)
	Small and Union Territories (7)	A & N Islands (AN), Chandigarh (CH), Dadra & NH (DNH), Daman & Diu (DD), Delhi (DL), Lakshadweep (LD), Pondicherry (PD)

aggregating data for preparing the reports which could have been utilized for more productive activities including analysis and sending feedback. The web enabled HMIS is a step in this direction where data aggregation and analysis is automated.

As such any health information remains incomplete unless it is compared with sociodemographic information and thus a hierarchy of indicators needs to be evolved to ensure that they are relevant for the level where action is to be taken. Information on the population and its dynamics come from various sources like census and sample surveys, primarily undertaken by the Registrar General of India and leading research institutions like the International Institute for Population Sciences, Mumbai. The National Rural Health Mission has categorised the States in the following categories on the basis of their health indicators and focus of the Mission. The State have thus been categorised as;

Data Collection Procedure:

The main source of the collection of data is the NRHM Health Statistics Information Portal. The web address of the Ministry of Health & Family Welfare, NRHM Health Management Information System (HMIS) Portal is **http://nrhm-mis.nic.in**

This website is the gateway to a wealth of information regarding the Health Indicators of India. The information on this website is being compiled from varied information sources such as National Family Health Survey (NFHS), District Level household Survey (DLHS), Census, SRS and performance statistics. The Health Statistics Information Portal facilitates the flow of physical and financial performance from the district level to the state HQ and the centre using a web based Health Management Information System (HMIS) interface. The portal also provides periodic reports on the status of the health sector. HMIS portal is conceived and developed by Ministry of Health & Family Welfare, with technical support by Vayam Technologies Ltd (formerly iBilt Technologies Ltd).

When we open the HMIS portal on its home page there is an option of HMIS Data Entry Login. When we click on it a new window of HMIS portal opens which asks for the User ID and Password for Log In. We use the departmental user ID and password which is the read only, by which we can only generate the information and cannot add or edit the information available on

the portal. There are various options present horizontally on the top of the webpage. From those options when we go to the Reports Section it displays the dropdown menu of various options which contains the Data Item Wise Report. When we click on it displays the home page to generate the report. We check to load the default parameters then select all the parameters, then we select all the data items, the report type as Across Districts, then we select the state and then click on Generate Report. The query is generated in the form of report.

The report hence generated is a Data Item Wise Report of MIS module MONTHLY CONSOLIDATED Proforma . This report contains various indicators like M1 [Ante Natal Care Services ANC], M2 [Deliveries], M3 [Number of Caesarean C-Section deliveries performed at], M4 [Pregnancy outcome & weight of new-born], M5 [Complicated pregnanices], M6 [Post - Natal Care], M7 [Medical Termination of Pregnancy (MTP)], M8 [RTI/STI Cases], M9 [Family Planning], M10 [CHILD IMMUNIZATION], M11 [Number of Vitamin A doses], M12 [Number of cases of Childhood Diseases reported during the month0-5 years:], M13 [Blindness Control Programme], M14 [Patient Services], M15 [Laboratory Testing], M16 [Stock Position (During the month)], M17 [Details of deaths reported during the month with probable causes:], Under the **Family Planning Services** there are various data items which are as follows:

9.01	**No. of NSV/ Conventional Vasectomy Conducted**
9.1.1.a	At PHCs
9.1.1.b	At CHCs
9.1.1.c	At Sub-divisional hospitals/ District Hospitals
9.1.1.d	At Other State Owned Public Institutions
9.1.1.e	Total {(a) to (d)}
9.1.2	At Private facilities
9.02	**No. of Laparoscopic sterilizations conducted**
9.2.1.a	At PHCs
9.2.1.b	At CHCs
9.2.1.c	At Sub-divisional hospitals/ District Hospitals
9.2.1.d	At Other State Owned Public Institutions
9.2.1.e	Total {(a) to (d)}
9.2.2	At Private facilities

9.03	**No. of Mini-lap Sterilizations conducted**
9.3.1.a	At PHCs
9.3.1.b	At CHCs
9.3.1.c	At Sub-divisional hospitals/ District Hospitals
9.3.1.d	At Other State Owned Public Institutions
9.3.1.e	Total {(a) to (d)}
9.3.2	At Private facilities
9.04	**No. of Post-Partum Sterilizations conducted**
9.4.1.a	At PHCs
9.4.1.b	At CHCs
9.4.1.c	At Sub-divisional hospitals/ District Hospitals
9.4.1.d	At Other State Owned Public Institutions
9.4.1.e	Total {(a) to (d)}
9.4.2	Private facilities
9.05	**No. of IUD Insertions**
9.5.1.a	At Sub-Centres
9.5.1.b	At PHCs
9.5.1.c	At CHCs
9.5.1.d	At Sub-divisional hospitals/ District Hospitals
9.5.1.e	At Other State Owned Public Institutions
9.5.1.f	Total {(a) to (e)}
9.5.2	Private facilities
9.06	**Number of IUD removals**
9.07	**Number of Oral Pills cycles distributed**
9.08	**Number of Condom pieces distributed**
9.09	**Number of Centchroman (weekly) pills given**
9.10	**Number of Emergency Contraceptive Pills distributed**
9.11	**Quality in sterilization services**
9.11.1	No. of **Complications** Following sterilization
9.11.1.a	Male
9.11.1.b	Female
	No. of **Failures** Following sterilization
9.11.2.a	Male
9.11.2.b	Female
	No. of **Death** Following sterilization
9.11.3.a	Male
9.11.3.b	Female

9.12	Number of Institutions having NSV trained doctors

Inclusion Criteria of the States for the study:

Kerala: Non- High Focus States

Uttarakhand: High Focus States

The states were selected on the basis of data available on the HMIS web portal. According to the feasibility of the study Family planning indicators data was available for the respective states which was needed for the analysis.

Study design: Retrospective Study

Study setting: Monitoring and Evaluation Department, Ministry of Health and Family welfare, Govt. Of India, New Delhi

Data source: HMIS portal under NRHM

Data type: secondary data of Family Planning for high-focus and non-high focus states, for the period 2008-09 to 2009-10.

Statistical analysis:

Rates and Proportions are calculated using MS- Excel.

Form of output:

Tables and Graphs

Chapter 5

Results and Findings:

Family Planning:

A) Performance in Family Planning Services:

Table 7: Comparison of annual performance in Family Planning services in **KERALA**, 2008-09 to 2009-10

Year	Female Sterilization		Male Sterilization		Total Sterilization		IUD Insertions	
	Achievement	Y-o-Y (%)	Achievement	Y-o-Y (%)	Achievement	Y-o-Y (%)	Achievement	Y-o-Y (%)
2008-09	123226	-	4657	-	127883	-	64440	-
2009-10	103881	-18.6	4292	-8.5	108173	-18.2	64331	-0.16

The HMIS data of Kerala shows a declining trend in family planning method use, including sterilizations and IUCD insertions. The data shows a decline in sterilization performance for 2009-10 as compared to 2008-09. There is a difference of -18.6% in female sterilization and -8.5 in male sterilization also a turn down of -0.16% in total IUD insertions. This could probably due to a change in reporting system and incomplete reporting by the state.

Table 8: Comparison of annual performance in Family Planning services in **Uttarakhand**, 2008-09 to 2009-10

Year	**Female Sterilization**		**Male Sterilization**		**Total Sterilization**		**IUD Insertions**	
	Achievement	Y-o-Y (%)	Achievement	Y-o-Y (%)	Achievement	Y-o-Y (%)	Achievement	Y-o-Y (%)
2008-09	29554	-	3868	-	33422	-	81338	
2009-10	21461	-37.7	2934	-31.8	24395	-37.0	98175	17.14

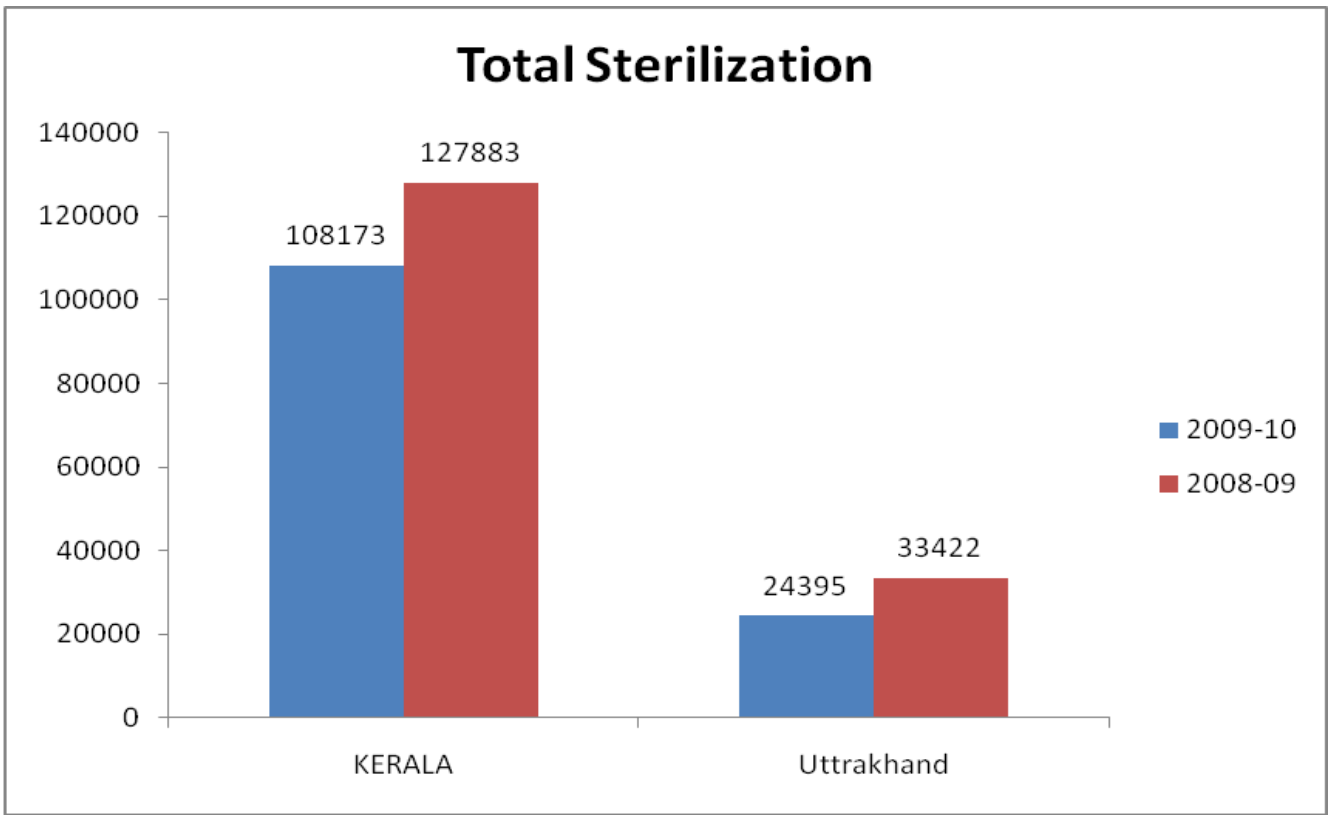
The HMIS data of Uttarakhand shows a declining trend in family planning method use, including sterilizations. The data shows a decline in sterilization performance for 2009-10 as compared to 2008-09. There is a difference of -37.7% in female sterilization and -31.8% in male sterilization. This could probably due to a change in reporting system and incomplete reporting by the state. But there is an improvement of 17.14% in total IUCD insertions.

B) Method specific performance in Family Planning Services:

B.1) Sterilization:

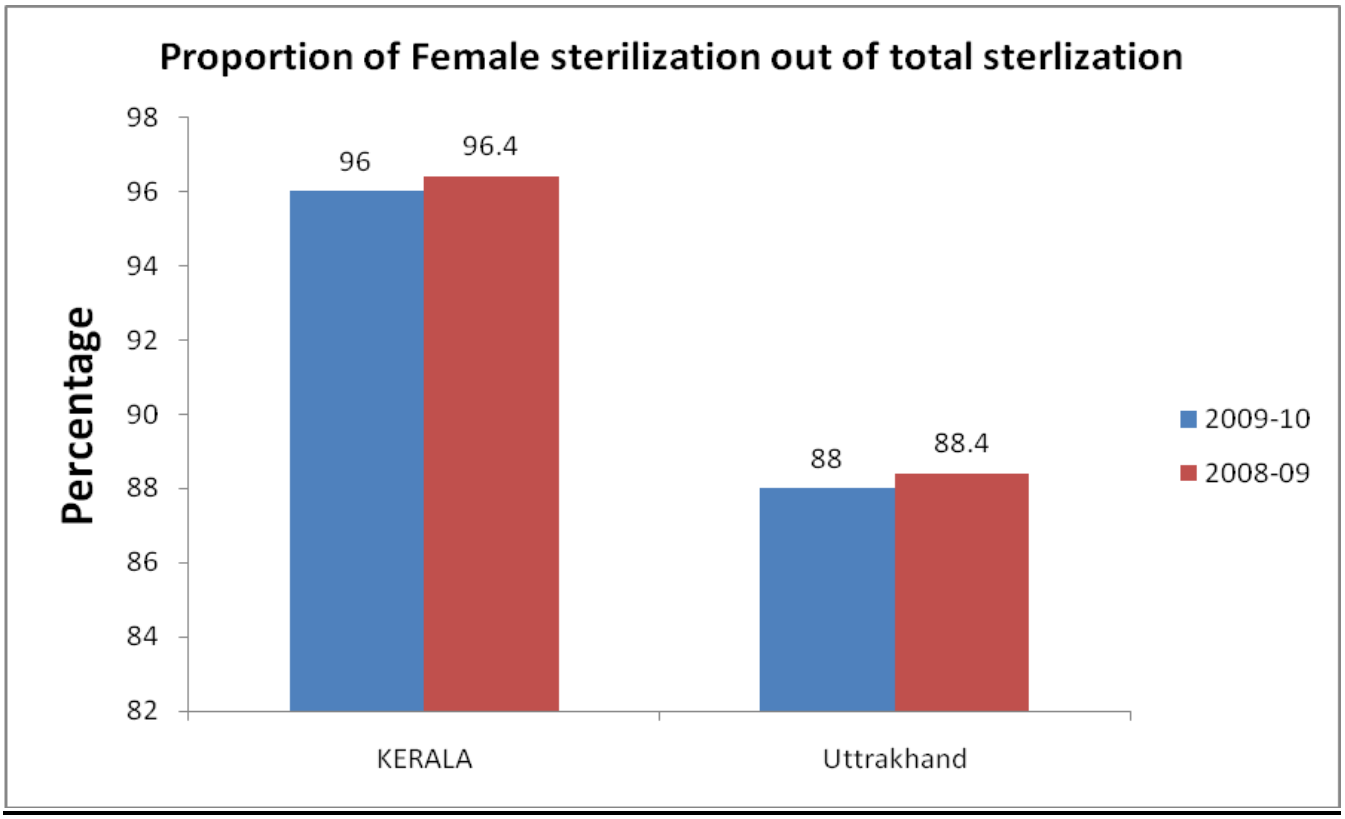
Sterilization (also spelled sterilization) is a surgical technique leaving a male or female unable to reproduce. It is a method of birth control. It is an important procedure of Family Planning services.

Fig 3: Total Sterilization during the period of 2008-09 and 2009-10



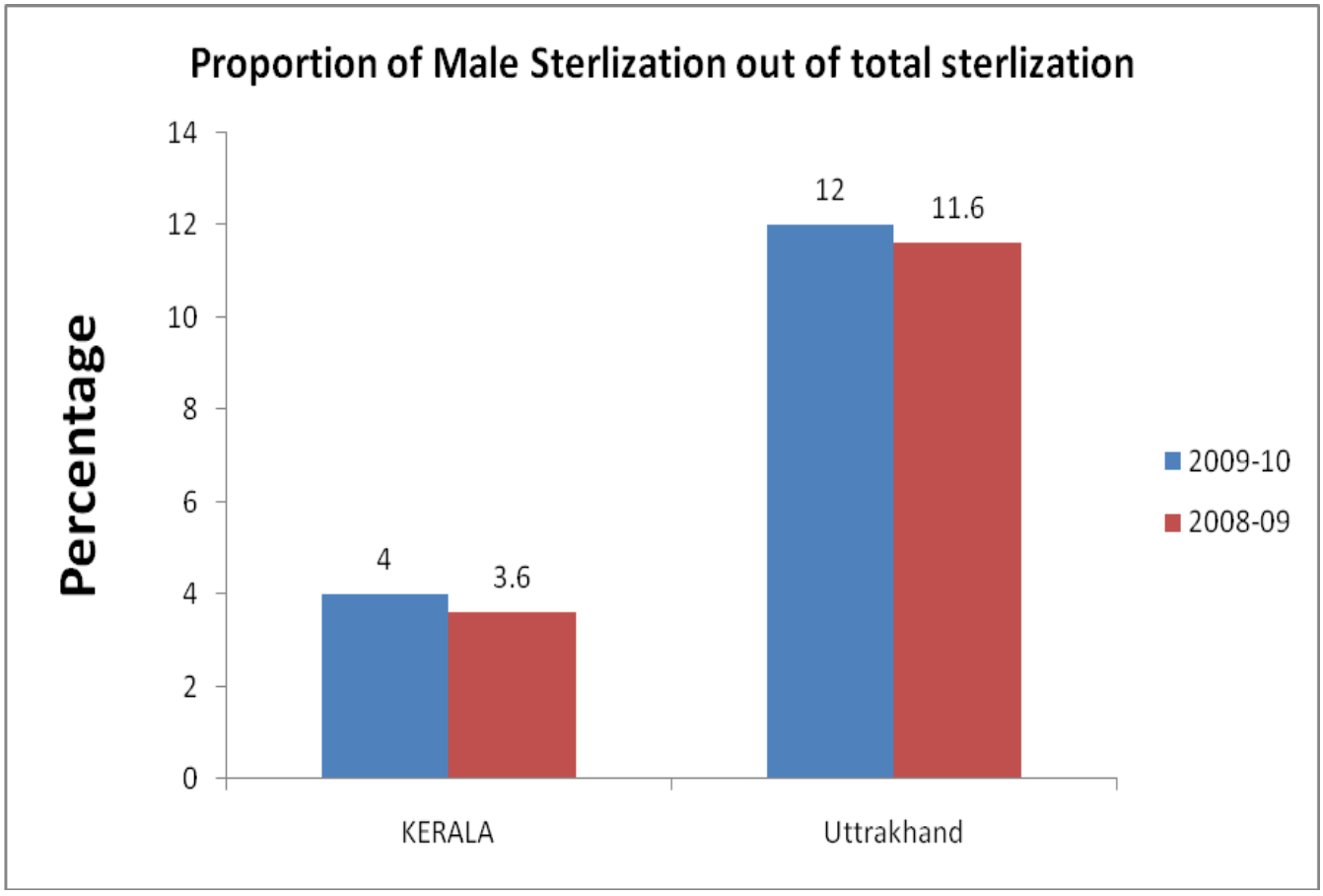
There is a sharp declination in the total number of sterilizations of Kerala during the period of 2009-10 as compared to 2008-09. It may be probably due to the incomplete reporting by the state or due to lack of family planning services during 2009-10. If we look at the figures of Uttarakhand it also shows slight turndown of the total sterilization. But if we compare the performances between the two states the status of Kerala is better than Uttarakhand. It may be due to the large population of Kerala, that the figures are higher than Uttarakhand.

Fig 4: Proportion of Female Sterilization out of Total Sterilization during the period of 2008-09 and 2009-10



On an average, during 2008-09, female sterilization was 96.4% of the total sterilization in Kerala and 88.4% in Uttarakhand. Kerala has reported large number of female sterilizations than Uttarakhand, it may be due to high literacy rate or high sex ratio of the state. There is a slight decline of 0.04% in both the states when compared with 2009-10 data.

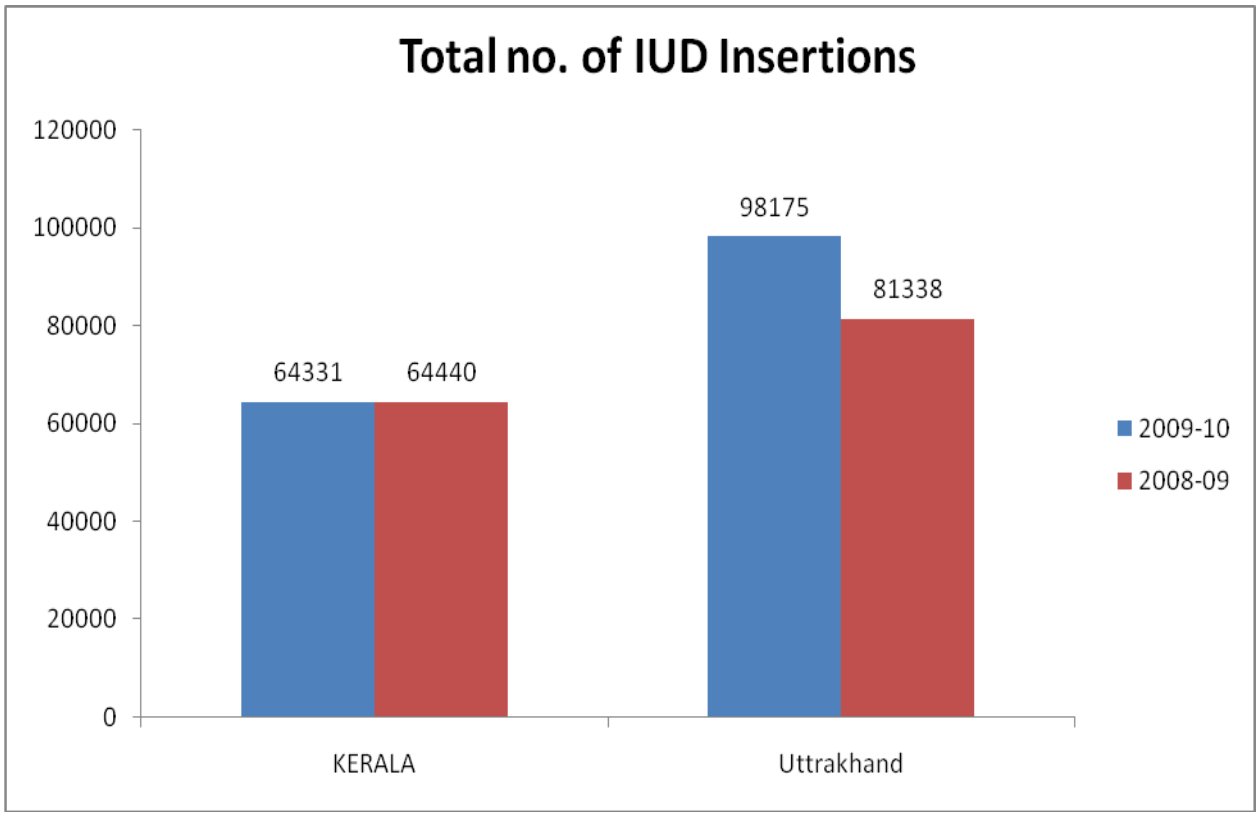
Fig 5: Proportion of Male Sterilization out of Total Sterilization during the period of 2008-09 and 2009-10



The statewise performance reveals that the proportion of Male sterilization (NSV) to total sterilization is very less in Kerala as only 3.6% in 2008-09. The proportion is also less in uttarakhand but if compared to kerala the figures are three times higher. In uttarakhand the proportion of male sterilization is 11.6% in 208-09. There is an inclination of 0.04% in the performance as compared to the year 2009-10.

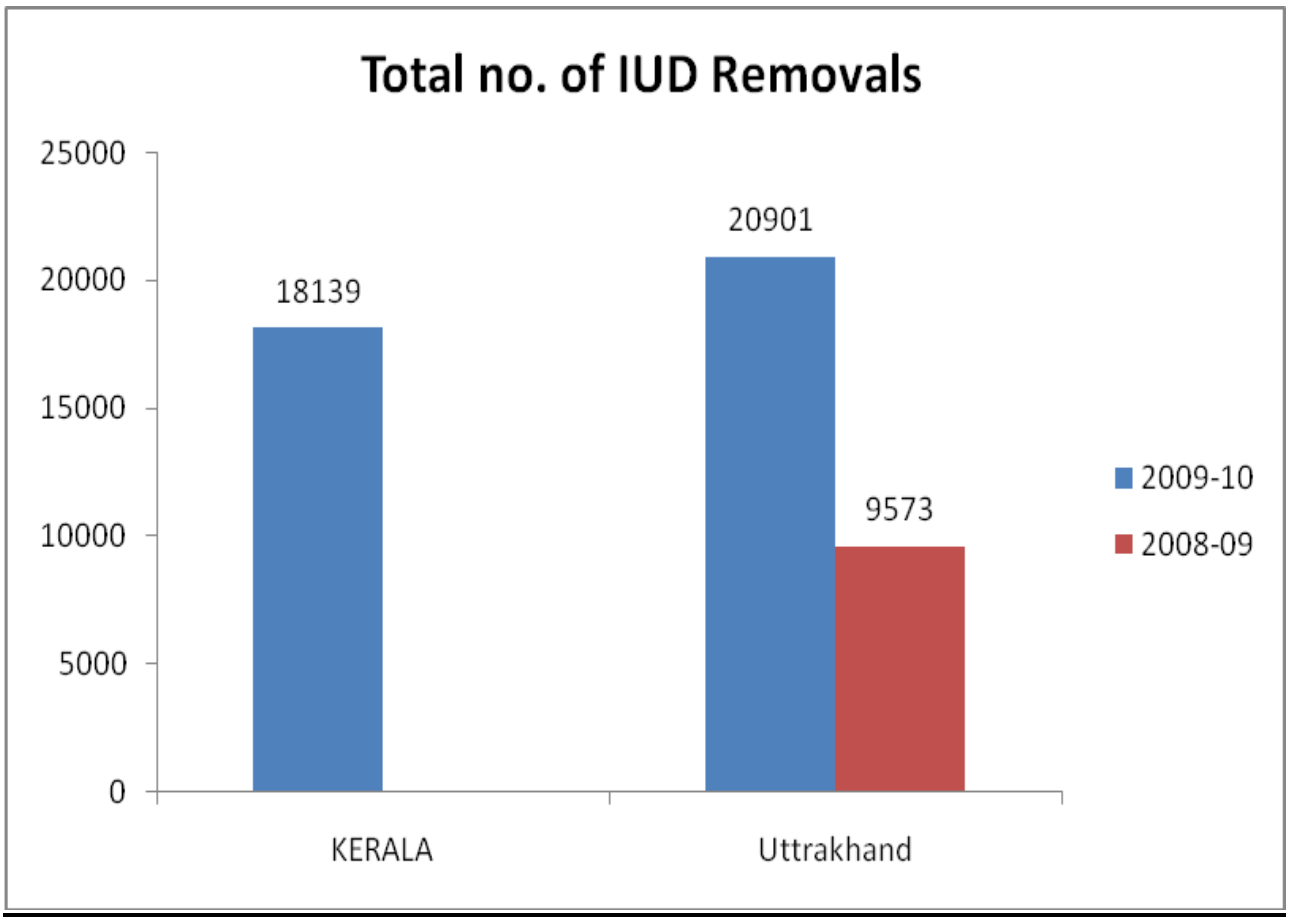
B.2) IUCD Insertions:

Fig 6: Total number of IUD Insertions during the period of 2008-09 and 2009-10



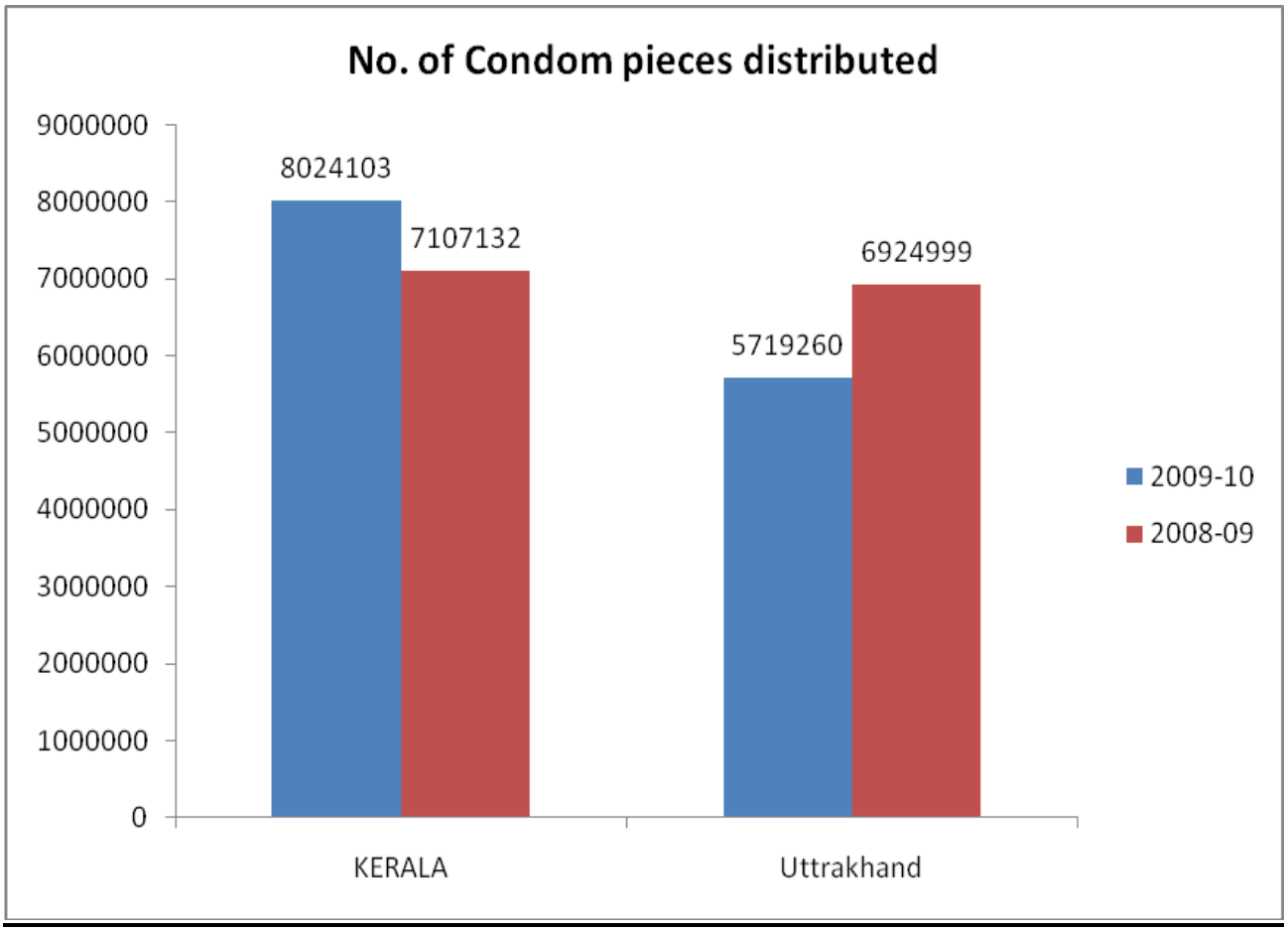
The number of IUD insertions has marginally risen to 98175 during 2008-09 as compared to 2008-09 in Uttarakhand. The contribution of Uttarakhand is high from kerala, it may be because Uttarakhand falls in High Focus Non North East states and may be Family Planning services are more prominent in Uttarakhand. The figures of Kerala are lower than Uttarakhand and also there is almost no difference in the consecutive two years.

Fig 7: Total number of IUD Removals during the period of 2008-09 and 2009-10



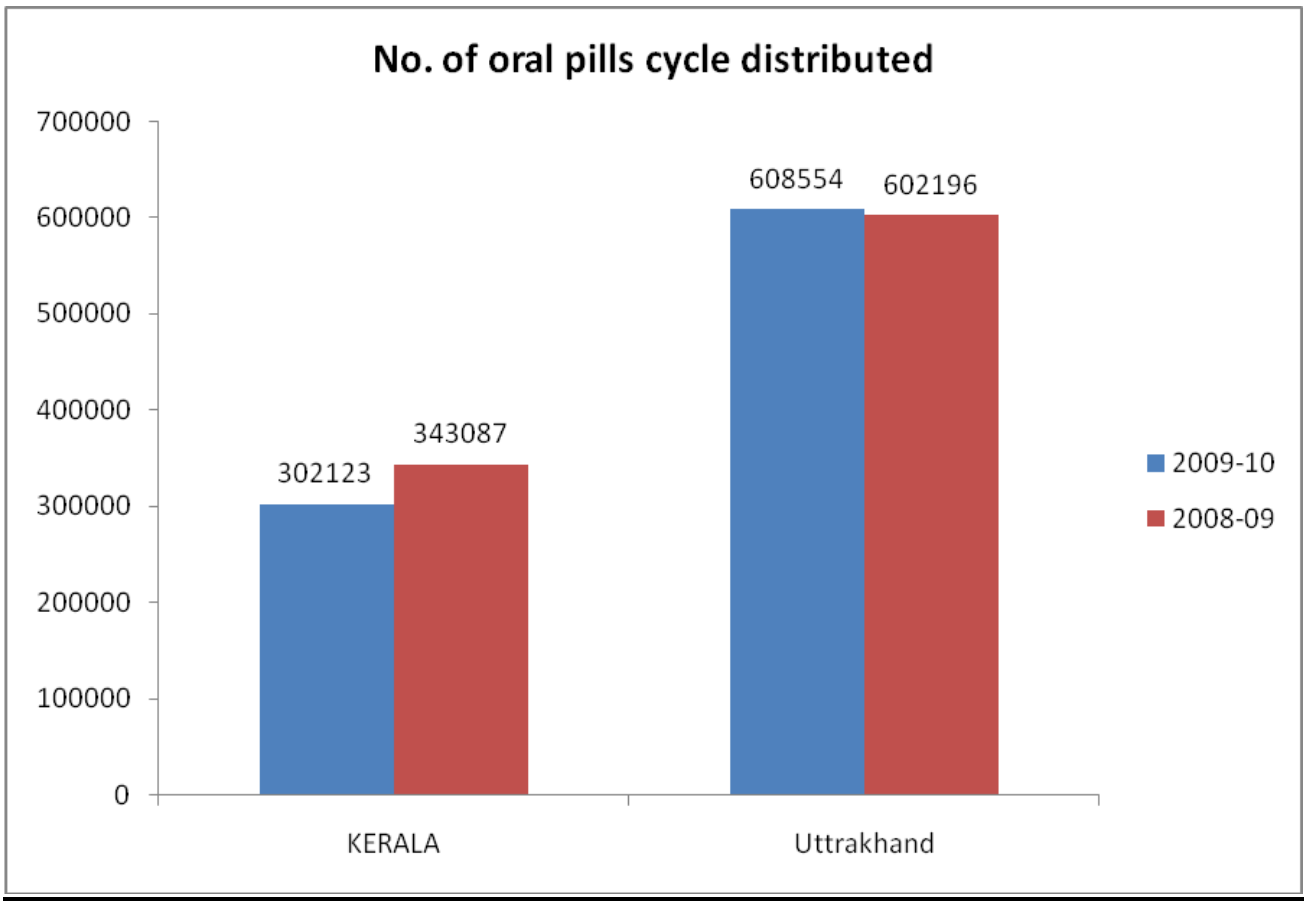
The above graph depics total number of IUD removals higher in Uttarakhand during the period of 2009-10 as compared to the Kerala, also there is an inclination of IUD removals in Uttarakhand during 2009-10 as compared to the figures of 2008-09. There is no reporting of total number of IUD removals in Kerala durig the period of 2008-09. It may be due to misreporting of data in Keral.

Fig 8: Total number of Number of Condom pieces distributed during the period of 2008-09 and 2009-10



The Graph shows an increase in total number of condom pieces distributed during the year 2009-10 as compared to2008-09 in Kerala, also the figures are higher than Uttarakhand. If we look at the figures of Uttarakhand, there is a declination in number of condom pieces distributed in the year 2009-10 as compared to 2008-09.

Fig 9: Total number of Oral Pills cycles distributed during the period of 2008-09 and 2009-10



There is a decrement in total number of Oral Pills cycles distributed during the period of 2009-10 as compared to 2008-09 in Kerala. Also the figures are low if we equate with Uttarakhand. In Uttarakhand 602196 numbers of oral pills cycles were distributed, but in Kerala it was almost half i.e. 343087.

Chapter 6

Conclusion and Recommendations:

Though Kerala has registered a significant improvement in key health care indicators, the health situation in the State reflects a paradox. It is a paradox of high morbidity and low mortality, which resulted in the crucial social problem of ageing. Kerala has made significant progress in improving the key healthy statistics: death rates, birth rates, infant mortality rates and life expectancy at birth. The state performance in the health sector has been better compared to the rests of the states in India. Still there is a long way to go in for improving the key health care indicators, new dimension of health status are emerging which need attention now.[3]

Though the health status of Kerala is comparatively far better compared to other Indian states, Kerala still ails in the health front. The population of Kerala is uniformly scattered throughout the state and is fairly well advanced in its demographic transition. The rapidly declining growth rate, highest mean age at marriage especially of families, a very high level of acceptance and awareness of family planning methods and fertility control, a moderate decline in the mortality rate etc are the commendable achievements in health standards which are almost comparable to that of developed countries in the world. The family welfare programme which is now being changes as Reproductive Child Health programme with more emphasis on mother and child health care, management of RTI / STI including HIV/AIDS adopting a client oriented approach to improve quality of services is sure to open up new vistas in the implementation of the integrated package scheme. A close study of the situation in Kerala would show that family planning has been accepted as a way of life.

In spite of belonging to Non high focus states, Kerala is showing low performance in family planning services except in total and female sterilizations. Other indicators of family planning methods are showing low performance than Uttarakhand. It may be due to large population than Uttarakhand. Also as Uttarakhand falls in high focus states, so family planning services are more prominent there.

Due to outstanding family planning services **Uttarakhand** is reaching close to its **objectives** as:

- Percentage reduction in unmet need for spacing methods among eligible couples
- Percentage reduction in unmet need for terminal methods among eligible couples
- Increase in contraceptive prevalence rate among eligible couples
- Reduction in percentage of girls marrying below age 18.

Increasing the Demand for FP Services in Uttarakhand:[4]

- By comprehensive media campaign to address the unmet need for family planning services, emphasize on males as "responsible partners" and to promote NSV.
- By organizing integrated RCH camps.
- Integrated RCH camps provide a wide range of services including counseling, antenatal and post-natal check-ups, TT vaccination and IFA distribution, RTI/STI treatment, immunization of children, IUCD insertions, oral pills, condoms and sterilization services including NSV. These camps will also provide complete information on different type of services available. Camps will be conducted in all the 84 blocks as per the norms.
- Medical Officers, ANMs and Link Workers are being made responsible for spreading the message among couples in general and counsel them to avail the services.

Family Planning camps:

Family Planning camps are being held at all block level PHC's/CHC's on every Thursday on rotation and at district hospital on every Tuesday of each month.

All eligible couples eager to adopt family planning practices may contact to:

1. CMS District hospitals on every Tuesday
2. MO I/C of each block PHC/CHC on every Thursday.

Limitations of the study:

1) Lack of complete data due to incomplete reporting of the states.
2) Change in the reporting system.
3) Incomplete documentation.

References:

1. **Ministry of Health & Family Welfare, National Rural Health Mission, Health Management Information System Portal (HMIS)**

   http://nrhm-mis.nic.in

2. **National Rural Health Mission (MoHFW)**

   http://mohfw.nic.in/NRHM.htm

3. Official website of Kerala

   http://www.kerala.gov.in/kercaljanr07/pg40-41.pdf

4. Official website of Uttarakhand

   http://gov.ua.nic.in/health/fw.html

5. India & Family Planning an overview by The Department of Family and Community Health
   World Health Organization Regional Office for South-East Asia