

STUDY ON RCH
IN
ONE GRAMPANCHAYAT OF SEVEN
SOUTHERN DISTRICTS OF ORISSA

A Comprehensive Report

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Executive Director

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1. INTRODUCTION

In the scheme of development planning in India over four decades substantial results have been achieved in terms of aggregate economic growth and qualitative excellence in several technical and creative fields. All the same, there has admittedly been a relative if unintended, neglect of human and social development, as distinct from the evident emphasis on material resources and service infrastructures. True, there have been significant attempts in support of social factors of development like education, nutrition and health, each in its own sphere and respecting the distinction of their disciplinary origins and departmental jurisdiction. Not surprisingly the essential link between the cluster of socio cultural factors from one hand and economic base to sustain on the other has remained weak. This situation has had a somewhat disabling effect particularly on the half of the populations in or near conditions of poverty. While seeking to understand the interplay of variable factors that help or hinder the human potential, the focus of the analysis is turned on the process of development through the sequential stages of child-women-child life cycle. This approach of centering the discussion on the human being comments itself on balance, despite two sets of deterrents. First the enormous differentials in the human conditions across the states and within each of them in terms of gender, social groups, economic class and urban impact and second the disparate sources of relevant information. While considering the factors of disparity and of development influences the life cycle, it would be logical to begin with life before birth, from conception. Through the formative stages of life and its development it is necessary to see the child with the mother. But what the mother is to the child is determined by her situations of life and status in the society as person and as a woman. These in turn are molded by the conditions of her own childhood and upbringing in her adolescent period. The passage from childhood to womanhood is admittedly difficult for large segment of female population despite the general trend of hopeful change in socio-economic indicators. The girl (adolescent stage) is a person in her own right, but in most places, and in several layers of society her duties are defined but her rights are not recognised.

The health disabilities to which a girl, woman or child suffer is therefore a central focus of this study through the picture of lifecycle.

The state of Orissa extends from 17.49 to 22.34 degrees North Latitude and from 81.28 to 87.29 degrees east Longitude in the eastern coast of India. The land area of Orissa is about 4.74% of the total land area of India. Total population of the state is 3.74% of the country. So, it has comparatively low density of population with 203 persons per sq. km. Compared to 273 at national level. Sex ratio of the state is higher than the national level. Flood, drought and cyclone mostly occur in the state and affects agriculture. Although agricultural forms the main stay of the population of Orissa, but there is lack of proper irrigation facilities. Oriya is the main speaking language of the state. Hinduism is prevalent almost in the 95%. Scheduled Caste, they comprise 16.20% of total population and Scheduled Tribe, they comprise 22.21% of total population. Tribal people mostly stay in the hilly underdeveloped areas, commonly constitute tribal belt of Orissa. Literacy status is very poor compared to the national level. For fulfillment of daily requirement, all the members of the family depend on one earning member who is not even competent enough to sustain his family.

There has been tremendous amount of scientific advancement in the field of modern medicine along with ensuring right kind of health system in the world. But in the state till now there is dependency of the people on the traditional systems of medicines due to lack of proper infrastructure for modern system of medicine. The places where there is availability of the facility of modern system of medicine, even the people are not getting right type of treatment in proper time due to negligence of either management or resource. Because of this in the interior place due to inadequate communications, uneven distributions of health care facility. Infant death, maternal death, high-risk pregnancy, Grade III & Grade IV malnutrition, Reproductive Tract Infections, Sexual Tract Infections and communicable diseases are on rise.

OVHA has always tried to put its best effort towards making health a reality for the people of Orissa. Its efforts were always intervened among the community at the grassroots level through its member organisations. Considering the poor quality of health mainly due to problems at mother, child and adolescent level, a study was planned on RCH. RCH is a new integrated concept by Government of India.

The footstep of RCH project was known as family planning programme in the fifties. It was purely demographic in nature. To it the elements of public education and extension were included. During seventies, the family planning programme was mainly focused on terminal methods. The programme was purely voluntary and the main effort of the government was to provide services on one hand and aware the people by information, education & communication on the other hand. But the programme became unsuccessful because of its rigid implementations and target-oriented nature. The family programme in the eighties was changed to family welfare programme when the health programmes for mother and child for reducing their mortality rate were incorporated to the previous one. During that period in the PHC the various ongoing programmes under MCH were like Universal Immunisation Programme, Oral rehydration therapy for diarrhoeal diseases and treatment for acute respiratory infection of children. The objective of all the above programmes were convergent and aimed at improving the health of mothers and young children by providing the facilities for prevention and treatment of major disease conditions. Therefore in the nineties all the above said programmes were incorporated under the banner of Child Survival and Safe Motherhood (CSSM) programme to increase beneficial impact, reducing the cost of each different programmes.

All the above concepts were target based and followed a top to bottom approach. Even the CSSM programme did not have any activity for the adolescent as well as for the mothers and couple suffering from RTI/STI/HIV/AIDS. So after a conference at Cairo in 1994 the concept of RCH came to light. This concept is to

provide the beneficiaries need based, client centered, demand driven, high quality integrated RCH services. The essential components of an integrated RCH package are:

- Services to promote safe motherhood
- Services to promote child survival
- Prevention and treatment of reproductive tract infections and sexually transmitted diseases
- Prevention and management of unwanted pregnancy reproductive health services for adolescents (safe abortions etc.)
- Health, sexuality and gender information, education and counseling
- Establishment of effective referral systems

Its approach is mainly through community-based organisations and follows bottom to top methods. NGO and voluntary organisations can be helpful in a much larger way to improve the out reach and make it a people's programme.

2. OBJECTIVES:

- To assess the socio-economic and demographic particulars of the study area.
- To assess the Reproductive and Child Health status of the population of the study area.
- To devise suitable intervention plans for the study area.

3. METHODOLOGY:

It was decided to conduct the study on RCH with active collaboration of seven field NGOs of the said project in their respective operational areas of Nayagarh, Boudh, Kandhamal, Ganjam, Gajapati, Koraput and Rayagada districts of Orissa. They selected one GP in their operational area for the study. The lists of these seven FNGOs are given below.

Sl no	Name of District	Name of FNGO	Name of Block	Name of GP
1	Nayagarh	Dahikhai Jubak Sangha	Ranpur	Patia
2	Boudh	Society for Human Resources and Ecological Development	Kantamal	Khatakhatia
3	Kandhamal	Indian Institute of Youth and Development	Tikabali	Koinkhar
4	Ganjam	Kajol Women Welfare Organisation	Chatrapur	Chikalakhandi
5	Gajapati	Social, Educational and Reconstruction of Village Environment	Kashinagar	Kharada
6	Koraput	South Orissa Voluntary Action	Koraput	Lankaput
7	Rayagada	Universal Service Organisation	Kolnara	Badakhilapadar

OVHA prepared a questionnaire for the study after thorough discussion among the study team members. The contents of the questionnaire were as follows.

- Socio-economic Status
- Demographic status
- Maternal Health
- Child Health
- Adolescent Health
- RTI/STI/HIV/AIDS

The pattern of questionnaire was as follows.

- Quantitative
- Qualitative – Knowledge, Attitude and Practice

One master copy each of the questionnaire and master sheet were circulated among the field NGOs for door to door baseline data collection in their operational areas.

In the operational areas, each of the seven FNGOs selected one Grampanchayat for RCH project operations. Under the guidance of RCH project co-ordinator, staff including 5-7 numbers of community health workers took the responsibility of conducting the data collection activity.

First they moved to their RCH operational area and conducted village level meetings regarding the purpose of the study. Door to door visit with data collection was done systematically with much effort. Few unavoidable problems came while interrogating a female respondent by a male person. Keeping in view the guidelines of OVHA, most of the FNGOs carried forward this study mainly with the help of female workers.

Most of the FNGOs sent the filled in Master sheet to OVHA. Few of them submitted the study report. This report was a comprehensive version of the original baseline survey master sheets and study reports.

4. STUDY AREA:

The total study area taken for this study comprises of seven southern districts of Orissa namely Nayagarh, Boudh, Kandhamal, Ganjam, Gajapati, Koraput and Rayagada. These areas are socio-economically backward, with hills and forests, deprived of most of the health inputs of state government.

5. LIMITATIONS OF THE STUDY

During these survey we have certain limitations, which may have affected the study results. These limitations were as follows.

- As the sample size is small in comparison to the total population of the eight districts, it may have affected the study results.
- All though utmost care has been taken to collect accurate and authentic data, some amount of interviewer bias, respondent bias and memory or recall bias can not be ruled out. This may have affected the study results.
- Analysis reports and recommendations have been given in wide spectrum assuming negligible amount of error while preparing the master sheets and study reports of each GP by FNGOs.

6. Tabulations and Analysis

Table 1: Sex wise Distribution of population.

Sl No	Name of District	Male Population	%	Female Population	%
1	Nayagarh	1690	50.97	1626	49.03
2	Boudh	2053	50.63	2002	49.37
3	Kandhamal	651	50.15	647	49.85
4	Ganjam	2689	51.03	2580	48.97
5	Gajapati	1562	50.08	1557	49.92
6	Koraput	1132	48.21	1216	51.79
7	Rayagada	984	46.33	1140	53.67
	Total	10761	49.98	10768	50.02

The above table reflects sex ratio of the population. It is defined as number of females per 1000 males. If we go through the above table, we can mark that Nayagarh, Boudh, Kandhamal, Ganjam and Gajapati districts presents adverse sex ratio for women. Where as in Koraput and Rayagada districts it is favourable for women. The sex compositions of the populations in the above case might have been affected by the differentials in the mortality conditions of male and female, sex selective migration and sex ratio at birth.

Table 2: Caste wise distribution of population.

Sl No	Name of District	SC	%	ST	%	OC
1	Nayagarh	343	10.34	1336	40.29	1637
2	Boudh	617	15.22	96	2.37	3342
3	Kandhamal	149	11.48	513	39.52	636
4	Ganjam	645	12.24	-	-	4624
5	Gajapati	404	12.95	1445	46.33	1270
6	Koraput	488	20.78	1242	52.90	618
7	Rayagada	133	6.26	1915	90.16	76
	Total	2779	12.91	6547	30.41	12207

The above table shows the People of other casts excluding SC and ST occupy maximum percentage in the community except in Gajapati, Koraput and Rayagada where the ST population accounts for maximum percentage. This higher percentage of other casts in the community in some districts lies in favour of our objective statement. Because as per the vision of RCH activities, any programme done will be executed through community based organisations where this kind of people mainly form the executive body. Our approach in this case will be equivalent to imparting health education from known to unknown in the community. The higher ST percentage in the community in some districts like Gajapati, Koraput and Rayagada reflects homogenous nature of the operational area. This will definitely enhance the level of acceptance of any development work started there.

Table 3: Age wise distribution of population

Sl No	Name of District	0-1 yrs	%	1-5 yrs	%	5-11 yrs	%	11-18 yrs	%	18-35 yrs	%	> 35 y
1	Nayagarh	105	3.17	275	8.29	467	14.08	515	15.53	1117	33.69	837
2	Boudh	102	2.52	514	12.68	442	10.90	543	13.39	1937	47.77	517
3	Kandhamal	37	2.85	112	8.63	174	13.41	239	18.41	345	26.58	391
4	Ganjam	128	2.43	516	9.79	748	14.20	841	15.96	1649	31.30	1387
5	Gajapati	57	1.83	281	9.01	475	15.23	411	13.18	854	27.38	1041
6	Koraput	101	4.30	284	12.10	222	9.45	243	10.35	1035	44.08	463
7	Rayagada	89	4.19	168	7.91	524	24.67	280	13.18	810	38.14	253
	Total	619	2.88	2150	9.99	3052	14.18	3072	14.27	7747	35.98	4889

The above table implies that the percentage of population below 18 years on an average in the seven districts is 41.32. This figure is purely in accordance with the demographic figure of under developed country. Out of this the percentage of population occupying in the age group of 11-18 years is around 14.27. This means that current percent of population entering into reproductive age group is quite high. This relates to high growth rate in the operational areas.

Table 4: Distribution of population according to marital status

Sl No	Name of District	Married	%	Unmarried	%	Separated	%	Others (Widow/ Widower)	%
1	Nayagarh	1538	46.38	1758	53.02	-	-	20	0.62
2	Boudh	2070	51.05	1914	47.20	17	0.42	54	1.33
3	Kandhamal	592	45.61	658	50.69	9	0.69	39	2.99
4	Ganjam	2572	48.81	2624	49.80	20	0.38	53	0.97
5	Gajapati	1550	49.70	1471	47.16	25	0.80	73	2.33
6	Koraput	1170	49.83	1106	47.10	22	0.94	50	2.05
7	Rayagada	1052	49.53	1051	49.48	-	-	21	0.98
	Total	10544	48.98	10582	49.15	93	0.43	310	1.21

From the above table it is evident that there is not much difference in the percentages of married population in each of seven districts. The unmarried population also includes the population below the age of 18 years. This explains the high percentage of unmarried population (49.15%). The unmarried population above the age of 18 years will be much lower than this figure.

Table 5: Distribution of population according to Literacy:

Sl No	Name of District	Illiterate	%	Literate	%
1	Nayagarh	1288	46.33	1492	53.67
2	Boudh	1354	41.13	1938	58.87
3	Kandhamal	446	40.88	645	59.12
4	Ganjam	1614	36.88	2762	63.12
5	Gajapati	1589	60.58	1034	39.42
6	Koraput	1492	78.98	397	21.02
7	Rayagada	1424	84.66	258	15.34

Total	9207	51.92	8526	48.08
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It can be easily ascertained from the above table that the illiterate percentage in the area is high (51.92%). Among the districts the illiterate percentage is very high at Rayagada (84.66%) and Koraput (78.98%) and Gajapati (60.58%). The literacy is calculated among the population above the age of seven. Earlier the population from 0-7 years is taken as illiterates, but w.e.f 1991 census they are not taken into account while calculating the literacy percentage. Literacy percentage is highest in Ganjam (63.12%). It can be said that the literacy rate of the interior districts is low compared to that of other districts. As per 1991 census a person can read, write and understand any language is considered to be literate. It is clear from the table that apparent literacy status of Gajapati, Koraput and Rayagada are good.

Table 6: Distribution of population according to educational status:

Sl No	Name of District	NFE	%	M.E.	%	H. S. E.	%	>H. S. E.
1	Nayagarh	993	66.56	234	15.68	189	12.67	76
2	Boudh	616	31.78	843	43.50	319	16.46	160
3	Kandhamal	202	31.32	328	50.85	106	16.43	9
4	Ganjam	371	13.43	1514	54.82	591	21.40	286
5	Gajapati	383	37.04	406	39.27	145	14.02	100
6	Koraput	-	-	396	99.75	-	-	1
7	Rayagada	102	39.53	150	58.14	6	2.33	-
	Total	2667	31.28	3871	45.40	1356	15.91	632

The table further indicates that on average seven districts, the percentage of literate population is up to ME standard. The percentage of population above HSC on average is around 7.41% and rest is NFE learners, which around 31.28%. The lack of higher qualifications may be due to inadequate Government institutions, less option for Government and non-Government job, poor economical status and may be due to inhibition to migrate to urban

areas. The NFE learners strength in the community explain that there is growing interest for education both adult and children.

Table 7: Distribution of households according to profession:

Sl No	Name of District	Agriculture	%	Rural work	%	Service	%	Others
1	Nayagarh	448	55.24	263	32.43	20	2.47	80
2	Boudh	813	91.04	45	5.04	15	1.68	20
3	Kandhamal	139	52.45	100	37.74	21	7.92	5
4	Ganjam	351	28.06	362	28.93	185	14.79	353
5	Gajapati	225	33.48	362	53.87	43	6.40	42
6	Koraput	456	68.16	194	29.00	11	1.64	8
7	Rayagada	344	67.58	154	30.26	5	0.98	6
	Total	2776	54.75	1480	29.19	300	5.92	514

The above table explains household's dependency on different type of professions for earning hood. As it indicates in the seven districts, the majority households depend on agriculture and no depend on service. Rest population depends mainly on rural works i.e. activities like civil works to the preparation of Bidi, Agarbati at their home. Most of the households depend on other types of profession. Although agriculture is major profession at most of family but their getting two proper square meal a day because next to impossible. It is may be due to lack of their knowledge regarding proper utilisation, land reformation, creation at irrigation system, use of high yielding variety of seeds, involvement of latest technology.

Table 8: Distribution of households according to annual income:

Sl No	Name of District	< Rs. 11,000	%	> Rs. 11,000	%
1	Nayagarh	789	97.29	22	2.71
2	Boudh	878	98.32	15	1.68
3	Kandhamal	245	92.45	20	7.55
4	Ganjam	983	78.58	268	21.42
5	Gajapati	611	90.92	61	9.08
6	Koraput	669	100.00	-	-
7	Rayagada	504	99.02	5	0.98
	Total	4679	92.29	391	7.71

From the above table districts on average 92.29% households have income less than 11 thousand. Household having income less than 11 thousand has been put as landmark for identifying those below poverty line. Those above BPL mostly depend on rural works and service. So this economical constraints is a major drawback for taking any kind of development project in the operational areas.

Table 9: Menstrual Period

Sl No	Name of District	Normal	%	Abnormal	%
1	Nayagarh	746	88.92	93	11.08
2	Boudh	1318	96.35	50	3.65
3	Kandhamal	23	8.68	242	91.32
4	Ganjam	1160	92.14	99	7.86
5	Gajapati	359	35.69	647	64.31
6	Koraput	712	89.22	86	10.78
7	Rayagada	300	54.84	247	45.16
	Total	4618	75.93	1464	24.07

This table reflects menstrual history with respect to duration. In majority cases on average in the seven districts is normal. But rest

around 24.07% complain of abnormal that means mostly scanty or excess flow. It may be due to inadequate nutrition specially protein and iron, controlled reproduction. Their ignorance very often aggravates this kind of situation.

Table 10: Menstrual Complains

Sl No	Name of District	Excessive Bleeding	%	Pain in lower abdomen	%	Backache	%
1	Nayagarh	99	17.97	180	32.67	272	49.3
2	Boudh	3	4.84	52	83.27	7	11.2
3	Kandhamal	5	9.26	47	87.04	2	3.70
4	Ganjam	65	22.89	135	47.53	84	29.5
5	Gajapati	195	29.32	210	31.58	260	39.1
6	Koraput	60	11.32	312	58.87	158	29.8
7	Rayagada	165	51.56	63	19.69	92	28.7
	Total	592	24.01	999	40.51	875	35.4

This table shows the common complains associated with menstrual cycle. As per the table around 41.51% on average complain of lower abdominal pain either prior to or during the menstrual flow. This mostly occurs in the nullipara and primipara second common problem is backache, which mostly occur in multipara. Excessive bleeding during menstrual flow is mostly of pathological in nature. Because of lack of knowledge regarding this complain mostly they do not opt for any treatment, advice or consultancy from others.

Table 11: Age at marriage

Sl No	Name of District	<18 yrs	%	>=18 yrs	%
1	Nayagarh	1147	74.58	391	25.42
2	Boudh	1533	74.06	537	25.94
3	Kandhamal	391	66.05	201	33.95
4	Ganjam	1889	73.44	683	26.56
5	Gajapati	914	58.97	636	41.03
6	Koraput	946	80.85	224	19.15
7	Rayagada	554	52.66	498	47.34
	Total	7374	69.94	3170	30.06

As per the table on average 69.94 marry below the age of 18 years and rest above 18 years. The age at which a female marries and enters reproductive period of life has great impact on her fertility. Early marriage is common in India. Female who marries before the age of 18 usually gives birth to more number of children than those married after 18 years. Besides that marriage before 18 years and bearing children has health hazardous impact.

Table 12: Gravida status:

Sl No	Name of District	0-1	%	2-3	%	>=4
1	Nayagarh	177	23.02	303	39.40	289
2	Boudh	243	23.48	500	48.31	292
3	Kandhamal	93	31.42	66	22.30	137
4	Ganjam	147	11.43	446	34.68	693
5	Gajapati	123	15.87	258	33.29	394
6	Koraput	101	17.26	219	37.44	265
7	Rayagada	102	19.39	284	53.99	140
	Total	986	18.70	2076	39.38	2210

As per the table percentage of mother with gravida status more than or equal to 4 is about 41.92. Mothers with Gravida status of 1 or 0 are around 18.70. Mother of higher gravida status mostly suffers from complications like abortion, malpresentation, prematurity, cord prolapse, shock, delayed involutions during puerperium. Besides that mother may suffer from protein energy malnutrition, anaemia, etc.

Table 13: Birth History (last pregnancy)

Sl No	Name of District	LB Male	%	LB female	%	SB male	%	SB female	%	Abortion	%
1	Nayagarh	350	45.51	351	45.65	5	0.65	6	0.78	37	4.81
2	Boudh	510	49.28	486	46.96	2	0.19	5	0.48	16	1.55
3	Kandhamal	83	28.04	76	25.68	54	18.24	53	17.91	16	5.40
4	Ganjam	582	45.26	580	45.10	39	3.03	35	2.72	28	2.18
5	Gajapati	300	38.71	290	37.42	21	2.71	18	2.32	106	13.68
6	Koraput	248	42.39	262	44.79	18	3.08	17	2.91	28	4.78
7	Rayagada	131	24.90	135	25.67	71	13.50	79	15.02	86	16.35
	Total	2204	41.81	2180	41.35	210	3.98	213	4.04	317	6.01

The above table shows percentage of male and female births are almost equal. Percentage of male stillbirth and still birth female there is little difference. Abortion rate is high around 6.01%. Abortion mainly in Rayagada district is extremely high around 60.35%. This may be due to high incidence of malaria, anaemia, heavy workload during early trimester, blighted ovum and

inadequate antenatal care. Abortion also occurs illegally at some interior places but those cases could not be short-listed because of social stigma.

Table 14: Antenatal check up (last pregnancy)

Sl No	Name of District	1-2 times	%	>=3 times	%	Never	
1	Nayagarh	90	11.70	173	22.50	506	
2	Boudh	317	30.63	259	25.02	459	
3	Kandhamal	15	5.07	12	4.05	269	
4	Ganjam	323	25.12	245	19.05	718	
5	Gajapati	158	20.39	254	32.77	363	
6	Koraput	234	40.00	35	5.98	316	
7	Rayagada	102	19.39	40	7.60	384	
	Total	1239	23.50	1018	19.31	3015	

Antenatal check up as per RCH guidelines should be done minimum of three times, first in or prior to 20 weeks, second in 8 months and third in 9 months. The main objective of antenatal check up is to find out baseline vital statistics and to correlate the vital statistics in the later months of pregnancy with previous one so as to find out normal or abnormal continuation of pregnancy, identification of risk factor. In the table 19.31% have antenatal check up. This means there is still ignorance of family as well as the mother to be to take care of lady who is pregnant.

Table 15: Antenatal check up by (last pregnancy)

Sl No	Name of District	Doctor	%	ANM/TBA	%	Health worker	%
1	Nayagarh	15	5.70	248	94.30	-	-

2	Boudh	569	98.78	7	1.22	-	-
3	Kandhamal	10	37.04	14	51.85	3	11.11
4	Ganjam	281	49.47	157	27.64	130	22.89
5	Gajapati	116	28.15	245	59.47	51	12.38
6	Koraput	-	-	269	100.00	-	-
7	Rayagada	-	-	62	43.66	80	56.34
	Total	991	43.90	1002	44.40	264	11.70

As per the table 44.4% antenatal check up are done by ANM/Trained TBA and 11.7% are done by Health workers mostly of NGO level. Although average 43.90% antenatal check up are done by doctors but Boudh district shows antenatal check up mostly by doctors which includes registered medical practitioners. In Koraput and Rayagada districts no antenatal check up are effected by a registered doctor. This may be due to inadequate health service points, medical professionals, inadequate communication facility, scattered living lifestyle, less option for institutional contacts during antenatal period.

Table 16: IFA Consumption (last pregnancy)

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	278	36.15	491	63.85
2	Boudh	327	31.59	708	68.41
3	Kandhamal	138	46.62	158	53.38
4	Ganjam	344	26.75	942	73.25
5	Gajapati	251	32.39	524	67.61
6	Koraput	112	19.15	473	80.85
7	Rayagada	132	25.10	394	74.90
	Total	1582	30.01	3690	69.99

This table reflects 30.01% of pregnant lady consumed IFA tablets. As per Government of India norms 100 tablets of IFA should be consumed during pregnancy. In India 50-60% of women belong to poor socio economic status and are anaemic in the last trimester of pregnancy. This type of anaemia is due to deficiency of iron and

folic acid. Anaemia is associated with high incidence of premature birth, post partum hamorage, puerperal sepsis and thromboembolisms.

Table 17: Vitamin A Solution Consumption (last pregnancy)

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	205	26.66	564	73.34
2	Boudh	189	18.26	846	81.74
3	Kandhamal	98	33.11	198	66.89
4	Ganjam	379	29.47	907	70.53
5	Gajapati	251	32.39	524	67.61
6	Koraput	105	17.95	480	82.05
7	Rayagada	182	34.60	344	65.40
	Total	1409	26.73	3863	73.27

As per the above table it is clear that Vitamin A consumption during last pregnancy is low. Vitamin A is given to pregnant lady to prevent night blindness in case of both mother and newly born babies. The deficiency of Vitamin A is usually leads to night blindness, the most common symptom which may latter on leads to cataract. In the vulnerable group like pregnant lady and children up to three years of age to consume additional dark leafy green vegetables along with red and yellow fruits are advised. Supplementary Vitamin A solution is also given in vulnerable groups.

Table 18: Time of taking Booster dose of TT

Sl No	Name of District	1 st trimester	%	2 nd & 3 rd Trimester	%	No TT given
1	Nayagarh	297	38.62	452	58.78	20
2	Boudh	209	20.19	820	79.23	6
3	Kandhamal	136	45.95	148	50.00	12
4	Ganjam	175	13.61	1101	85.61	10
5	Gajapati	261	33.68	511	65.94	3
6	Koraput	130	22.22	444	75.90	11
7	Rayagada	110	20.91	398	75.67	18
	Total	1318	25.00	3874	73.48	80

As per the table around 73% of women take TT in second and third trimester. Around 25% take TT in first trimester. As per the schedule two doses of TT should be given to pregnant lady - first dose at 16-20 weeks and second dose at 20-24 weeks of pregnancy. However no pregnant women should be denied even one dose of TT if she is seen late in pregnancy.

Table 19: Ante natal Registration of Pregnancy

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	384	49.93	385	50.07
2	Boudh	576	55.65	459	44.35
3	Kandhamal	121	40.88	175	59.12
4	Ganjam	330	25.66	956	74.34
5	Gajapati	539	69.55	236	30.45
6	Koraput	312	53.33	273	46.67
7	Rayagada	115	21.86	411	78.14
	Total	2377	45.09	2895	54.91

As per the table around 45% of pregnant women are registered. Registration is important for each and every pregnant lady to find out their basal health status, to identify danger signals, to advise

them on family planning and rearing of child as well as to prepare their mentality for delivery.

Table 20: High risk pregnancy identification

Sl No	Name of District	Doctor	%	ANM/TBA	%	Health Worker	%	Others	
1	Nayagarh	10	90.91	1	9.09	-	-	-	
2	Boudh	-	-	-	-	-	-	-	
3	Kandhamal	4	17.39	12	52.17	7	30.44	-	
4	Ganjam	27	35.06	31	40.26	19	24.68	-	
5	Gajapati	32	35.56	57	63.33	1	1.11	-	
6	Koraput	-	-	53	100.00	-	-	-	
7	Rayagada	-	-	6	75.00	2	25.00	-	
	Total	73	27.86	160	61.07	29	11.07	-	

As per the table it is clear that doctors identified 28% high-risk pregnancies. The doctors here include doctors of different disciplines like homeopathic, allopathic and Ayurvedic. We found out that about 61% high-risk pregnancies are diagnosed by ANMs and Trained TBAs. The high-risk cases include elderly prime (30 years and above), Malpresentation, antepartum haemorrhage, pre eclampsia and eclampsia, elderly grand multiparus, prolonged pregnancy etc.

Table 21: Delivery place (last child)

Sl No	Name of District	Domiciliary	%	Institutional	%
1	Nayagarh	558	78.37	154	21.63
2	Boudh	854	85.14	149	14.86
3	Kandhamal	206	77.44	60	22.56
4	Ganjam	824	66.13	422	33.87
5	Gajapati	530	84.26	99	15.74
6	Koraput	462	84.77	83	15.23
7	Rayagada	312	75.00	104	25.00
	Total	3746	77.77	1071	22.23

From the above table around 78% of delivery are conducted at domiciliary place. Around 22% of delivery are institutional. Although institutional delivery is better than domiciliary delivery from technical point of view, but domiciliary delivery has following advantages like familiar surroundings, less chance of cross infection to baby, making the mothers able to keep eyes upon her children and domestic affairs.

Table 22: Delivery attended by (last delivery)

Sl No	Name of District	Doctor	%	ANM/TBA	%	Health Worker	%	Others
1	Nayagarh	24	3.37	199	27.95	-	-	489
2	Boudh	215	21.44	416	41.48	211	21.03	161
3	Kandhamal	7	2.63	26	9.78	7	2.63	226
4	Ganjam	97	7.79	277	22.23	484	38.84	388
5	Gajapati	56	8.90	281	44.68	48	7.63	244
6	Koraput	7	1.28	462	84.77	-	-	76
7	Rayagada	-	-	257	61.78	39	9.37	120
	Total	406	8.43	1918	39.82	789	16.38	1704

As per the table we found that around 65% deliveries are conducted by trained persons. But rest are being conducted by

those who have no idea or least ideas about the process of delivery. In most such cases the delivery conducted leads to complications either during delivery or after delivery. Keeping in view the traditional customs and blind beliefs immediate interventions of modern methods is not possible. So in this case untrained persons should be first trained up.

Table 23: Postpartum complications (last delivery)

Sl No	Name of District	Post Partum Haemorrhage	%	Reproductive Tract infection	%	Others	
1	Nayagarh	1	1.85	-	-	53	
2	Boudh	-	-	-	-	-	
3	Kandhamal	7	63.64	3	27.27	1	
4	Ganjam	115	26.62	84	19.44	233	
5	Gajapati	274	56.50	2	0.41	209	
6	Koraput	25	19.84	18	14.29	83	
7	Rayagada	55	46.61	14	11.86	49	
	Total	477	38.91	121	9.87	628	

The above table indicates complications like postpartum haemorrhage in 39% of delivery. This may be due to malnutrition, lack of sufficient iron reserve in the body, lack of proper knowledge of delivery. Reproductive Tract Infections is around 10% of delivery. This may be due to practice of unhygienic methods of delivery by untrained persons. The infection of RTI complemented with poor supervision by doctors in tribal people may lead to infertility latter on.

Table 24: History of Post natal check up (attendant) (last delivery)

Sl No	Name of District	Doctor	%	ANM/TBA	%	Health Worker	%	Others
1	Nayagarh	23	12.43	34	18.38	-	-	128
2	Boudh	-	-	3	100.00	-	-	-
3	Kandhamal	-	-	6	75.00	2	25.00	-
4	Ganjam	34	10.24	99	29.82	190	57.23	9
5	Gajapati	58	14.68	279	70.63	48	12.15	10
6	Koraput	-	-	262	100.00	-	-	-
7	Rayagada	3	5.45	32	58.18	18	32.73	2
	Total	118	9.52	715	57.66	258	20.81	149

This table shows around 87% of postnatal check up done by trained personnel. Out of seven districts, in Gajapati, around 15% of postnatal check up are done by doctors. As per Government of India guidelines minimum of three number of post natal check ups should be done.

Table 25: FP methods (Types):

Sl No	Name of District	Vasectomy	%	Tubectomy	%	IUD	%	Cu-T	%	Condom	%
1	Nayagarh	-	-	120	72.73	-	-	6	3.64	2	1.21
2	Boudh	1	0.52	125	64.43	-	-	20	10.31	40	20.63
3	Kandhamal	-	-	24	63.16	1	2.63	1	2.63	2	5.26
4	Ganjam	20	3.71	452	83.86	5	0.93	1	0.19	3	0.55
5	Gajapati	2	0.76	252	95.45	-	-	1	0.38	9	3.41
6	Koraput	21	27.63	55	72.37	-	-	-	-	-	-
7	Rayagada	35	13.01	122	45.35	28	10.41	9	3.35	-	-
	Total	79	5.12	1150	74.43	34	2.20	38	2.46	56	3.62

This table reflects different types of family planning methods adopted by people of reproductive age group. Around 74% of family planning methods are of tubectomy type, which is

permanent of FP method. Vasectomy, IUD like Copper T and Condom are proportionately practised in the community.

Table 26: Permanent FP method (age distribution):

Sl No	Name of District	<25 yrs	%	25-30 yrs	%	>30 yrs	
1	Nayagarh	13	10.83	57	47.50	50	
2	Boudh	-	-	-	-	126	
3	Kandhamal	1	4.17	5	20.83	18	
4	Ganjam	185	39.20	199	42.16	88	
5	Gajapati	78	30.71	97	38.19	79	
6	Koraput	-	-	-	-	76	
7	Rayagada	-	-	38	24.20	119	
	Total	277	22.54	396	32.22	556	

As per the table it is clear that 45% of people above the age of 30 years practice different types of family planning methods. In the age group of 25-30 years, 32% of people where as in the age group below 25 years 23% adopt FP methods. It is obvious that awareness of using methods in lower age group like adolescent and newly married persons is not quite good.

Table 27: Permanent FP method (number of children):

Sl No	Name of District	One	%	Two	%	3-4 child	%	5 child	%
1	Nayagarh	-	-	18	15.00	44	36.67	43	35.83
2	Boudh	2	1.59	60	47.62	37	29.36	25	19.84
3	Kandhamal	1	4.17	8	33.33	4	16.67	4	16.66
4	Ganjam	28	5.93	94	19.92	167	35.38	87	18.43
5	Gajapati	22	8.66	83	32.68	85	33.46	50	19.69
6	Koraput	-	-	4	5.26	7	9.21	16	21.05
7	Rayagada	-	-	-	-	40	25.68	83	52.87
	Total	53	4.31	267	21.72	384	31.25	308	25.06

This table shows around 31% of people adopt permanent type of family planning method after they had three to four number of children. Whereas the percentage of people adopting permanent FP methods with two number of children is around 22%. As per expected national reproductive rate of 1, by 2000 AD the percentage of people undergoing permanent sterilisation with 2 children should be increased proportionately.

Table 28: Mortality history (percentages):

Sl No	Name of District	<1 yrs M	<1 yrs F	1-5 yrs M	1-5 yrs F	5-10 yrs M	5-10 yrs F	10-17 yrs M	10-17 yrs F	17-25 yrs M	17-25 yrs F	25-35 yrs M	25 yrs
1	Nayagarh	86	106	8	10	1	6	1	2	3	7	2	9
2	Boudh	-	-	26	-	-	-	-	-	-	-	-	-
3	Kandhamal	40	30	8	7	3	2	1	-	1	-	1	-
4	Ganjam	34	31	10	3	3	1	4	1	1	1	5	2
5	Gajapati	22	13	4	10	2	5	3	2	3	5	1	7
6	Koraput	-	-	-	-	-	-	-	-	-	-	-	-
7	Rayagada	10	4	1	2	2	3	3	3	2	6	4	10
	Total	192	184	57	32	11	17	12	8	10	19	13	28

According to this table total number of mortality below the age group of one is quite high. This may be due to immaturity, birth injury, difficult labour, malnutrition, Whooping cough, influenza, ARI, Multiple birth, poor socio economic status, ignorance of child care, bad environmental sanitation etc. Decrease in the death rate of this are group reflects the good socio economic status along with improvement of health status of that area. The next important age group where high death rate occurs is 1-5 years. This may be due to malnutrition, poor immunisation etc.

Table 29: Maternal Mortality History (Ante natal, Natal and Post natal)

Sl No	Name of District	Death during pregnancy	%	Death during delivery	%	Death after delivery and within 42 days
1	Nayagarh	-	-	6	42.86	8
2	Boudh	2	66.67	1	33.33	-
3	Kandhamal	-	-	-	-	2
4	Ganjam	3	33.33	2	22.22	4
5	Gajapati	1	8.33	7	58.33	4
6	Koraput	7	43.75	9	56.25	-
7	Rayagada	-	-	-	-	-
	Total	13	23.22	25	44.64	18

This table reflects maternal mortality. A maternal death is defined as “the death of women while pregnant or within 42 days of termination of pregnancy irrespective of duration of site of pregnancy from any cause related to or aggravated by pregnancy or its management but not from accidental or incidental cause. From this table the death during delivery is around 45% which may be due to mismanagement during the process of delivery untrained TBA.

Table 30: Maternal Mortality History (cause)

Sl No	Name of District	Anaemia	%	Toximia	%	PPH	%	
1	Nayagarh	9	64.29	1	7.14	1	7.14	
2	Boudh	2	66.67	-	-	1	33.33	
3	Kandhamal	1	50.00	-	-	-	-	
4	Ganjam	2	22.23	3	33.33	3	33.33	
5	Gajapati	1	8.33	-	-	10	83.34	
6	Koraput	7	43.75	2	12.50	7	43.75	
7	Rayagada	-	-	-	-	-	-	
	Total	22	39.28	6	10.71	22	39.29	

The above table reflects most maternal death occurs due to anaemia or postpartum occur to the maximum percentage. These two important causes can be well related to age of pregnant lady at birth of child, parity, family size, poverty, illiteracy, ignorance and prejudice, poor environment conditions and social customs etc.

Table 31: Infant Mortality History (Cause)

Sl No	Name of District	Malnutrition	%	LBW	%	Non Immunisation	%	Others
1	Nayagarh	14	16.28	23	26.74	28	32.56	21
2	Boudh	-	-	-	-	-	-	-
3	Kandhamal	-	-	-	-	2	5.00	38
4	Ganjam	15	44.12	-	-	10	29.41	9
5	Gajapati	5	22.73	5	22.73	7	31.82	5
6	Koraput	-	-	-	-	-	-	-
7	Rayagada	1	10.00	3	30.00	5	50.00	1

	Total	35	18.23	31	16.15	52	27.08	74
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The above table reflects the cause of infant deaths. Due to lack of immunisation, diarrhoea, RTI maximum number of infant die. As per policy, every child should be given complete primary immunisation doses by the age of 2 years against 6 major killer diseases. ORS should be supplied to the needy. Immediate treatment of RTI should be done.

Table 32: Abortion History (type)

Sl No	Name of District	Spontaneous	%	Induced	%
1	Nayagarh	23	62.16	14	37.84
2	Boudh	-	-	16	100.00
3	Kandhamal	14	87.50	2	12.50
4	Ganjam	25	89.29	3	10.71
5	Gajapati	72	67.92	34	32.08
6	Koraput	28	100.00	-	-
7	Rayagada	62	72.09	24	27.91
	Total	224	70.66	93	29.34

This table reflects around 71% of abortions are spontaneous in nature. This may be due to malaria typhoid, antipartum haemorrhage, diabetes, blighted ovum etc. This usually happens due to ignorance of people about social aspect of abortion. In the table around 29% induced abortions are reported. In most cases these abortions are done illegally and septic environment.

Table 33: Abortion history (Place)

Sl No	Name of District	Domiciliary	%	Institutional	%
1	Nayagarh	23	62.16	14	37.84
2	Boudh	6	37.50	10	62.50
3	Kandhamal	15	93.75	1	6.25
4	Ganjam	17	60.71	11	39.29
5	Gajapati	70	66.04	36	33.96
6	Koraput	28	100.00	-	-
7	Rayagada	80	93.02	6	6.98
	Total	239	75.39	78	24.61

This table reflects that around 25% abortions are done at institutions which may be observations of trained personnel within aseptic environment. Rest of abortions are done in domiciliary place. Some times domiciliary abortions are done by untrained TBAs which may lead to some complications later on.

Table 34: Abortion History (attendant):

Sl No	Name of District	Doctor	%	ANM/TBA	%	Health Worker	%	Others
1	Nayagarh	14	37.84	23	62.16	-	-	-
2	Boudh	7	43.75	3	18.75	6	37.50	-
3	Kandhamal	2	12.50	8	50.00	3	18.75	3
4	Ganjam	7	25.00	3	10.71	8	28.57	10
5	Gajapati	33	31.13	58	54.72	15	14.15	-
6	Koraput	-	-	28	100.00	-	-	-
7	Rayagada	7	8.14	24	27.91	28	32.56	27
	Total	70	22.08	147	46.37	60	18.93	40

This table reflects that around 22% abortions are attended by doctors. So in this case the complication rates are found to be negligible. Where as 13% are attended by untrained persons. Most cases of infertility, pelvic inflammatory diseases, RTI, can be related to this circumstances.

Table 35: History of breast feeding (time)

Sl No	Name of District	Just after birth	%	Within 72 hours of birth	%	After 72 hours of birth	
1	Nayagarh	50	7.13	546	77.89	105	
2	Boudh	-	-	789	79.22	207	
3	Kandhamal	87	54.72	26	16.35	46	
4	Ganjam	197	16.95	607	52.24	358	
5	Gajapati	136	23.05	263	44.58	191	
6	Koraput	510	100.00	-	-	-	
7	Rayagada	-	-	266	100.00	-	
	Total	980	22.35	2497	56.96	907	

Breast feeding is important because the child gets cholostrum which is an important element required for development of immunity status of the body. The first breast milk contains maximum amount of colostrum. As per the table around 22% of mother feed breast milk just after birth. As per guidelines it should be as soon as possible within one hour. So level of awareness of mother should be increased to breast-feed their babies immediately after birth.

Table 36: History of exclusive breast feeding (time)

Sl No	Name of District	<= 4 months	%	> 4 months	%
1	Nayagarh	93	13.27	608	86.73
2	Boudh	892	89.56	104	10.44
3	Kandhamal	64	40.25	95	59.75
4	Ganjam	491	42.25	671	57.75
5	Gajapati	151	25.59	439	74.41
6	Koraput	-	-	510	100.00
7	Rayagada	266	100.00	-	-
	Total	1957	44.64	2427	55.36

The above table shows that around 45% of mother feed breast milk exclusively up to four months. But rest more than four months may be up to one year or two years. Usually a mother secretes 500-600 ml of milk that is sufficient for the baby up to four months. But beyond that if the baby completely depend on mother milk then he is deprived of important body forming elements, minerals, as a result of which he suffers from malnutrition infections and poor growth.

Table 37: History of supplementary feeding (time)

Sl No	Name of District	Before 4 months with breast milk	%	Before 4 months without breast milk	%	After 4 months with breast milk	%	After 4 months without breast
1	Nayagarh	296	42.23	-	-	194	27.67	211
2	Boudh	-	-	-	-	686	68.88	310
3	Kandhamal	25	15.72	-	-	58	36.48	76
4	Ganjam	242	20.82	300	25.82	322	27.71	298
5	Gajapati	217	36.78	51	8.65	93	15.76	229

6	Koraput	-	-	-	-	510	100.00	-
7	Rayagada	-	-	-	-	266	100.00	-
	Total	780	17.79	351	8.01	2129	48.56	1124

This table reflects before four months 18% of mother give to their baby supplementary food while 49% of mother give their child supplementary food after 4 months. Normally a child should be given supplementary food which of semisolid nature from five months up to 12 months.

Table 38: Breast feeding (taboos)

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	688	98.15	13	1.85
2	Boudh	207	20.78	789	79.22
3	Kandhamal	82	51.57	77	48.43
4	Ganjam	728	62.65	434	32.35
5	Gajapati	343	58.14	247	41.86
6	Koraput	510	100.00	-	-
7	Rayagada	266	100.00	-	-
	Total	2824	64.42	1560	35.58

From the above table it is clear that around 64% mother express some or other kind of taboos related to breast feeding in right time. Most common thing that is practised in rural area is giving sugar solution to the new born baby before starting breast milk.

Table 39: Vaccination history (last child)

Sl No	Name of District	Complete dose	%	Occasional	%
1	Nayagarh	117	16.69	584	83.31
2	Boudh	251	25.20	745	74.80
3	Kandhamal	127	79.87	32	20.13
4	Ganjam	388	33.39	774	66.61
5	Gajapati	289	48.98	301	51.02
6	Koraput	-	-	510	100.00
7	Rayagada	38	14.29	266	85.71
	Total	1210	27.60	3174	72.40

Complete dose of vaccination means completion of immunisation schedule within two years. So as per table around 28% of last children have taken complete dose of vaccination.

Table 40: Measles vaccination History (last child)

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	286	40.80	415	59.20
2	Boudh	251	25.20	745	74.80
3	Kandhamal	95	59.75	64	40.25
4	Ganjam	531	45.70	631	54.30
5	Gajapati	250	42.37	340	57.63
6	Koraput	-	-	510	100.00
7	Rayagada	123	46.24	143	53.76
	Total	1536	35.04	2848	64.96

Measles vaccination is important for preventing child from Whooping cough. It is given to child from 9-12 months. If in the tribal area the mother with her child visits health centres, before 9

months of age of child then considering the difficulties for her next visit by 9 months, the child should be vaccinated. If the child returns by the age of 9-12 months then next dose of measles vaccine is should be given as per schedule. Out of seven districts around 35% of last children have taken measles vaccine at right time.

Table 41: Vitamin A Solution Supplement (last child)

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	292	41.65	409	58.35
2	Boudh	588	59.04	408	40.96
3	Kandhamal	149	93.71	10	6.29
4	Ganjam	623	53.61	539	46.39
5	Gajapati	289	48.98	301	51.02
6	Koraput	68	13.33	442	86.67
7	Rayagada	-	-	266	100.00
	Total	2009	45.83	2375	54.17

Children of the age group 6 months to three years are highly susceptible to vitamin A deficiency. So they are provided with vitamin A supplement every six months as per guidelines. From the above table it is observed that 46% of last children have taken vitamin A regularly.

Table 42: Two hours rest in the last trimester after day meal:

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	121	16.99	591	83.01
2	Boudh	353	35.19	650	64.81
3	Kandhamal	NA	-	NA	-
4	Ganjam	494	39.65	752	60.35
5	Gajapati	189	30.05	440	69.95
6	Koraput	176	32.29	369	67.71
7	Rayagada	124	29.81	292	70.19
	Total	1457	32.01	3094	67.99

All the pregnant lady are advised to take at least two hours of rest after day meal in the last trimester of pregnancy. It is found out from the above table that about 32% of mothers have knowledge regarding this.

Table 43: Less physical labour in the last trimester of pregnancy

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	303	42.56	409	57.44
2	Boudh	780	77.77	223	22.23
3	Kandhamal	NA	-	NA	-
4	Ganjam	413	33.15	833	66.85
5	Gajapati	209	33.23	420	66.77
6	Koraput	517	94.86	28	5.14
7	Rayagada	212	50.96	204	49.04
	Total	2434	53.48	2117	46.52

All pregnant ladies are advised to abstain form heavy physical work in the last trimester to prevent spontanous abortion. From the

seven districts of Orissa it was found that 53% of mothers during their last trimester of pregnancy practised to do less physical work.

Table 44: Family support/help during pregnancy

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	322	41.87	447	58.13
2	Boudh	710	68.6	325	31.4
3	Kandhamal	NA	-	NA	-
4	Ganjam	469	36.47	817	63.53
5	Gajapati	217	28.00	558	72.00
6	Koraput	531	90.77	54	9.23
7	Rayagada	291	55.32	235	44.68
	Total	2540	51.05	2436	48.95

Pregnancy is a physiological aspect. All ladies want to be a mother in their lives. But a lady when becomes pregnant for the first time, because of her ignorance about delivery and rearing a child after its birth, remain under psychological pressure. So the most important element that helps her during that period is support of her family especially her husband. From the table it is quite clear that in 51% of total families there is family support.

Table 45: Excess food during pregnancy is harmful

Sl No	Name of District	Yes	%	No	%
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1	Nayagarh	544	70.74	225	29.26
2	Boudh	425	41.06	610	58.94
3	Kandhamal	NA	-	NA	-
4	Ganjam	418	32.50	868	67.50
5	Gajapati	233	30.06	542	69.94
6	Koraput	367	62.74	218	37.26
7	Rayagada	391	74.33	135	25.67
	Total	2378	47.79	2598	52.21

Excess amount of food given to pregnant lady causes big baby that complicates delivery. This taboo as per the table was found among 48% of people in the seven districts. Actually food consumption during pregnancy should be increased not only from quantitative point of view but also from qualitative point of view. During pregnancy a lady requires additional three hundred calories extra food.

Table 46: Knowledge of high-risk pregnancy in the family

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	259	33.68	510	66.32
2	Boudh	225	21.74	810	78.26
3	Kandhamal	NA	-	NA	-
4	Ganjam	317	24.65	969	75.35
5	Gajapati	89	11.48	686	88.52
6	Koraput	53	9.06	532	90.94
7	Rayagada	253	48.10	273	51.90
	Total	1196	24.04	3780	75.96

The important aspect of antenatal check up is to find out high-risk pregnancy cases and to refer them to the nearest hospital for advise of a doctor. As health services is not accessible to each and every corner in the tribal area, so family members should have some knowledge of high-risk pregnancy cases. From the table it is clear that around 24% of total family studied have some knowledge of

high-risk pregnancy. High-risk pregnancy cases includes elderly primie gravida, grand multi para, antepartum haemorrhage, eclampsia, malpresentation etc.

Table 47: Is ANC useful?

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	272	35.37	497	64.63
2	Boudh	525	50.72	510	49.28
3	Kandhamal	NA	-	NA	-
4	Ganjam	414	32.19	872	67.81
5	Gajapati	233	30.06	542	69.94
6	Koraput	23	3.93	562	96.07
7	Rayagada	307	58.37	219	41.63
	Total	1774	35.65	3202	64.35

Ante natal check up covers antenatal period. Along with this proper care in the antenatal period usually leads to safe delivery. In antenatal check up both mother along with the baby growing inside the womb are checked up and any disturbance during the normal continuation of pregnancy is identified, referred to health institutions, advised for family support, advice for family planning are given. From the table it is known that 36% of respondents thought that ANC is useful.

Table 48: Is PNC useful?

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	243	31.60	526	68.40
2	Boudh	515	49.76	520	50.24
3	Kandhamal	NA	-	NA	-
4	Ganjam	380	29.55	906	70.45
5	Gajapati	172	22.19	603	77.81
6	Koraput	23	3.93	562	96.07
7	Rayagada	305	57.98	221	42.02
	Total	1638	32.92	3338	67.08

Postnatal care includes check up of mother after delivery along with check up of baby and advice to mother regarding her health improvement to previous state, taking care of her baby. Postnatal check up can identify any disturbance during involution state of all body organs of mother, birth weight of baby, feeding problem, disturbance in vital components of baby etc. From the above table it is clear that about 33% of respondents think that the postnatal check up is useful.

Table 49: Have you gone for PNC after last child birth?

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	167	23.46	545	76.54
2	Boudh	700	69.79	303	30.21
3	Kandhamal	NA	-	NA	-
4	Ganjam	518	41.57	728	58.43
5	Gajapati	70	11.13	559	88.87
6	Koraput	-	-	545	100.00
7	Rayagada	129	31.01	287	68.99
	Total	1584	34.81	2967	65.19

Minimum of three times of postnatal check up should be done. It is clear from the table that about 35% of respondents practised PNC after child birth.

Table 50: Knowledge on PNC

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	198	27.81	514	72.19
2	Boudh	303	30.21	700	69.79
3	Kandhamal	NA	-	NA	-
4	Ganjam	384	30.82	862	69.18
5	Gajapati	115	18.28	514	81.72
6	Koraput	53	9.72	492	90.28
7	Rayagada	154	37.02	262	62.98
	Total	1207	26.52	3344	73.48

It is clear from the above table that about 27% of respondents have knowledge on PNC. Among the districts Koraput have least knowledge on PNC.

Table 51: Is cholostrum (first breast milk) is useful?

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	218	28.35	551	71.65
2	Boudh	125	12.08	910	87.92
3	Kandhamal	NA	-	NA	-
4	Ganjam	522	40.59	764	59.41
5	Gajapati	70	9.03	705	90.97
6	Koraput	-	-	585	100.00
7	Rayagada	-	-	526	100.00
	Total	935	18.79	4041	81.21

Cholostrum is thick yellowish material secreted from breast milk for one to two days after delivery. It contains imminoglobilin, protein, etc. that are essential to give body resistance. It specially protects against RTI. From the table it is clear that about 19% of respondent think that cholostrum is useful.

Table 52: Age of initiating supplementary food

Sl No	Name of District	After 4 months	%	Before 4 months	%
1	Nayagarh	288	40.45	424	59.55
2	Boudh	101	10.07	902	89.93
3	Kandhamal	NA	-	NA	-
4	Ganjam	603	48.39	643	51.61
5	Gajapati	194	30.84	435	69.16
6	Koraput	545	100.00	-	-
7	Rayagada	416	100.00	-	-
	Total	2147	47.18	2404	52.82

In tribal area mother feed her milk to the baby for one to two years even more than that. Some of them practise giving additional food before four months unwards, some give after one year. As per the requirement mother milk is sufficient for a baby upto four months.

After that additional semisolid food known as supplementary food like, smashed rice, dal, khichdi, etc. should be given after four months onwards. It is clear from the table that about 47% have idea that supplementary food should be started after four months. About 53% started it before four months.

Table 53: Knowledge on FP

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	1472	95.71	66	4.29
2	Boudh	828	40.00	1242	60.00
3	Kandhamal	NA	-	NA	-
4	Ganjam	562	21.85	2010	78.15
5	Gajapati	465	30.00	1085	70.00
6	Koraput	127	10.85	1043	89.15
7	Rayagada	347	32.98	705	67.02
	Total	3801	38.19	6151	61.81

Family planning methods are mostly adopted for spacing among children, saves the live of women and children, improves health of women and children and benefits families, communities and society. We found out that about 38% of respondents have knowledge on FP. In Nayagarh the knowledge on FP is quite high at about 96% and in Koraput the knowledge is quite low at about 11%.

Table 54: Decision taken about using FP method by

Sl No	Name of District	Husband	%	Wife	%	Others	%	Cant s
1	Nayagarh	569	37.00	97	6.30	-	-	872
2	Boudh	828	40.00	828	40.00	414	20.00	-
3	Kandhamal	NA	-	NA	-	NA	-	NA
4	Ganjam	1607	62.48	438	17.03	124	4.82	403
5	Gajapati	405	26.13	119	7.68	-	-	1026
6	Koraput	63	5.38	-	-	87	7.44	1020
7	Rayagada	990	94.11	62	5.89	-	-	-
	Total	4462	44.84	1544	15.51	625	6.28	3321

As per RCH guidelines both husband and wife should share equal decisions for family planning. But for the table it is obvious that 45% of husband take decisions in comparison to 16% of wife. It means that husband take major part for family size as well as family planning.

Table 55: History of Birth Spacing

Sl No	Name of District	0-2 years	%	>=3 years	%	Don't Know
1	Nayagarh	120	15.60	266	34.59	383
2	Boudh	829	80.10	103	9.95	103
3	Kandhamal	NA	-	NA	-	NA
4	Ganjam	501	38.96	244	18.97	541
5	Gajapati	372	48.00	123	15.87	280
6	Koraput	-	-	-	-	585
7	Rayagada	-	-	60	11.41	466
	Total	1822	36.62	796	16.00	2358

In poor Indian families a minimum of three years gap should be between consecutive birth. It is because a mother within this three years will be prepared for next delivery by storage of important elements like iron, calcium, protein etc. In the studied seven districts around 16% of couples have knowledge of three years of birth spacing.

Table 56: Knowledge about abortion (MTP)

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	922	59.95	616	40.05
2	Boudh	414	20.00	1656	80.00
3	Kandhamal	NA	-	NA	-
4	Ganjam	258	10.03	2314	89.97
5	Gajapati	609	39.29	941	60.71
6	Koraput	97	8.29	1073	91.71
7	Rayagada	106	10.08	946	89.92
	Total	2406	24.18	7546	75.82

Abortion in this case means medical termination of pregnancy. MTP can be done under certain conditions like poor socio economic status, ill health of mother, unwanted pregnancy, foetal abnormalities by chicken pox to pregnant lady in registered institutions under supervision of registered medical practitioners. But in tribal area people have no sufficient knowledge about MTP and under unavoidable and unsociable conditions by traditional means which latter on leads to complications. We found from the table that about 24% have knowledge on abortion.

Table 57: Knowledge on RTI

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	77	10.01	692	89.99
2	Boudh	52	5.02	983	94.98
3	Kandhamal	NA	-	NA	-
4	Ganjam	85	6.61	1201	93.39
5	Gajapati	5	0.65	770	99.35
6	Koraput	-	-	585	100.00
7	Rayagada	-	-	526	526
	Total	219	4.40	4757	95.60

When there is reproductive tract infection, the common complain are eaching, swelling, secretion of some irritating fluids from the genital tract. Ignorance of this sometimes leads to infertility. Knowledge of respondent on RTI is found to be negligible i.e. about 4.4%. This is a thrust area in RCH project.

Table 58: Knowledge on STI

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	-	-	1538	100.00
2	Boudh	207	10.00	1863	90.00
3	Kandhamal	NA	-	NA	-
4	Ganjam	35	1.36	2537	98.64
5	Gajapati	-	-	1550	100.00
6	Koraput	-	-	1170	100.00
7	Rayagada	-	-	1052	100.00
	Total	242	2.43	9710	97.57

Sexual Tract Infections are contagious diseases. Any partner infected, infects other partner. So treatment is consecutively done for both the partners. There are three generations sexual Tract

Infections. We found that the knowledge on STI is negligible in the society i.e. about 2.43%. This is also a thrust area in RCH project.

Table 59: HIV/AIDS patients in the locality

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	-	-	811	100.00
2	Boudh	-	-	-	-
3	Kandhamal	-	-	-	-
4	Ganjam	-	-	1251	100.00
5	Gajapati	-	-	672	100.00
6	Koraput	-	-	669	100.00
7	Rayagada	-	-	509	100.00
	Total	-	-	3912	100.00

HIV and AIDS are extreme ends of one spectrum. These cases are detected by contact tracing and cluster testing methods. In the study area we found no cases of HIV/ AIDS cases.

Table 60: Knowledge on adolescent on FLE

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	5	0.97	510	99.03
2	Boudh	NA	-	NA	-
3	Kandhamal	NA	-	NA	-
4	Ganjam	18	2.14	823	97.86
5	Gajapati	19	4.62	392	95.38
6	Koraput	-	-	243	100.00
7	Rayagada	-	-	280	100.00
	Total	42	1.83	2248	98.17

Adolescent means from age group of 10-19 years. Adolescent stage is the preparatory phase for all activities in the adulthood. In Indian traditions the family life education is only imparted to the persons who are married. But as per RCH plan adolescent should also be trained on family life education so that they will be mentally prepared for the coming physiological and social changes in their lives. We found that knowledge of adolescent on FLE is very negligible in the study area i.e. 1.83%.

Table 61: Knowledge on adolescent on menstrual hygiene

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	59	22.96	198	77.04
2	Boudh	26	9.59	245	90.41
3	Kandhamal	NA	-	NA	-
4	Ganjam	158	37.62	262	62.38
5	Gajapati	95	46.34	110	53.66
6	Koraput	-	-	121	100.00
7	Rayagada	-	-	140	100.00
	Total	338	23.90	1076	76.10

Knowledge on adolescent on menstrual hygiene is important because after the menstrual flow uterus becomes vulnerable to any external infections. So unless sanitary napkins are used, it may lead

to infection of uterus, with various complications. It is found that 24% of adolescent have knowledge on menstrual hygiene.

Table 62: Knowledge of adolescent on personal hygiene

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	72	13.98	443	86.02
2	Boudh	109	20.07	434	79.93
3	Kandhamal	NA	-	NA	-
4	Ganjam	313	37.22	528	62.78
5	Gajapati	218	53.04	193	46.96
6	Koraput	-	-	243	100.00
7	Rayagada	72	25.71	208	24.29
	Total	784	27.67	2049	72.33

Personal hygiene means, bathing regularly, massaging oil in the body and hair, taking call of nature regularly, brushing teeth regularly, Cutting nails regularly etc. It is found that about 28% of adolescent have good knowledge on personal hygiene.

Table 63: Use of sanitary napkin at the time of menstruation (adolescent)

Sl No	Name of District	Yes	%	No	%
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1	Nayagarh	94	36.58	163	63.42
2	Boudh	NA	-	NA	-
3	Kandhamal	NA	-	NA	-
4	Ganjam	274	65.24	146	34.76
5	Gajapati	77	37.56	128	62.44
6	Koraput	121	100.00	-	-
7	Rayagada	-	-	140	100.00
	Total	566	49.52	577	50.48

While studying the usage of sanitary napkins at the time of menstruation we found from the above table that about 50% practise use of sanitary napkins. Usage of sanitary napkin is very good in Koraput and very less in Rayagada.

Table 64: Attitude of adolescent on FP

Sl No	Name of District	Good	%	Excellent	%	Don't know
1	Nayagarh	-	-	-	-	515
2	Boudh	NA	-	NA	-	NA
3	Kandhamal	NA	-	NA	-	NA
4	Ganjam	338	40.19	81	9.63	422
5	Gajapati	114	27.74	143	34.79	154
6	Koraput	-	-	-	-	243
7	Rayagada	32	11.42	32	11.43	216
	Total	484	21.14	256	11.18	1550

The attitude of adolescent on FP is found to be good

or excellent in about 32% cases which is quite encouraging for future family planning programme managers.

Table 65: Ideal age of women for 1st child is 20-25 years.

Sl No	Name of District	Yes	%	No	%
1	Nayagarh	1188	77.24	350	22.76
2	Boudh	1656	80.00	414	20.00
3	Kandhamal	NA	-	NA	-
4	Ganjam	2562	99.61	10	0.39
5	Gajapati	1550	100.00	-	-
6	Koraput	-	-	1170	100.00
7	Rayagada	200	19.01	852	80.99
	Total	7156	71.71	2796	28.09

About attitude of the respondents towards ideal age of marriage we found that about 72% of respondents have expressed the ideal age of marriage is 20-25 years.

7. SUMMERY OF FINDINGS

In this summery of findings of the study in seven districts of the state, we have tried to give an overview of the situation of mother, child and adolescent with respect to their quality of health. The analysis builds on variety of contributions on specific subjects and from different geographic areas provided by professionals, institutions and villagers.

Most situational analysis come up against many difficulties, how one can possibly summarise the conditions and context of the lives of mother, children and adolescent in the operational areas of such size and with wide differences make geographic, social, economic and cultural is a difficult task. Thus whenever we present statistics we have tried to portray the range of diversity taking a holistic view rather than sectoral path to analysis. In order to prepare a subjective yet objective analysis we have chosen a twin approach. First we have sought to sketch a description that will reflect as clearly as possible the life situations through successive stages in the life cycles, mother-child-adolescent-mother. Second we have tried to understand the living context of any stage of above said life cycle not in isolated sector but as whole with inter related parts. In following the framework of the life cycle we have used qualitative data as well as statistics in order to stay as close as possible to the real life experienced in the operational area.

Complementing the first part of analysis, which tries to describe and analyse conditions of a human being through social, economical and cultural environment. The second part looks after the traditional and modern methods of health care systems in day to day practices along with their knowledge and attitude. Like all attempts to encapsule complex situations and relationships in few

pages the analysis too suffers from several weaknesses. One of which may be the clear understanding of OVHA baseline questionnaire by the staff collecting data. Secondly, The correct response by villagers to the staff concerned. Possibly the most important strength of this study is involvement of government health workers/ICDS workers and local leaders.

Here we have tried to prepare the questions (subjective and objective) to get descriptive ideas, letting the facts speak for themselves. We admit a bias for adolescent as information could not be obtained directly from them. In pursuing the logic of life cycle we decided to start with the life before and around birth as that situations conditions so much of life chances the child would have later in life. We then proceed to discuss infancy and early years. Then, we discussed about the adolescent girl and the young women, the mother-to-be.

After having attempted to trace the lifecycle in this way with conscious emphasis on adolescent be intended to assist and protect the mother, the child through the years to adulthood by different project.

The following are the important findings of the study.

- Sex ratio is good.
- Study area is heterogeneous.
- Married and unmarried persons are in equivalent proportions.
- Literacy status of population, especially female literacy status is poor.
- Population is primarily dependent on agriculture for their livelihood.
- 92% of population are below poverty line.
- Early marriage is very common in the study area.
- Most commonly women of all age group complain of problems related to menstruation.
- Most mothers have become pregnant for more than four times may be up to ten to twelve.

- Rampant ignorance of pregnant lady for regular antenatal check up, consumption of important elements like iron, folic acid, vitamin A, extra calorie of food etc. during pregnancy.
- High birth rate along with poor birth spacing is commonly observed.
- High-risk pregnancy cases are quite high.
- Delivery is mostly done at domiciliary places conducted by untrained persons.
- Rampant ignorance of mother about postnatal checkup.
- Postpartum hemorrhage is among the commonest complications after delivery.
- Percentage of population undergoing different types of family planning methods is not as per norms.
- Domiciliary abortion by untrained persons is quite high.
- Rampant ignorance of the mother about immediate breast-feeding, supplementary feeding, usefulness of breast feeding, vitamin A supplement to baby etc.
- Proportion of children undergoing immunisation is low.
- Knowledge on RTI and STI is very low.
- Knowledge of adolescent on personal hygiene is very low.

7. RECOMMENDATIONS

Based on the above findings the study wishes to recommend the following measures to improve the nutritional status of the population.

The literacy status of the population especially female literacy status needs to be improved. The literacy status can be improved by opening more number of NFE centres for both child and adult learners. Measures to decrease dropout rate needs to be taken.

Since most of the people are below poverty line and dependent on agriculture, so, involvement of latest technology, application of high yielding varieties of seeds, chemicals, pastes, fertilisers and proper land reformation may increase their socio economic status. This may be a state for increasing their standard of living.

As human life has number of facets, one is related with other through dimensions. Therefore giving importance to any state of life means securing all the affairs of subsequent state of life. During pregnancy the lady should be highly motivated to consume extra calorie of food, iron, folic acid, vitamin A etc. This may be through supplementary elements or consumption of food from which all these requirements can be fulfilled. This measure takes care of health of both pregnant lady as well as the baby to be born.

The mother should be motivated for antenatal check up, given knowledge regarding high-risk pregnancy case identification. Delivery must be conducted in aseptic conditions experienced persons. Untrained TBAs should be trained.

As the baby takes birth, the mother should start immediate breast feeding, regular weight check up, prevention of diarrhoea, immunisation etc. are few important aspects to be covered to maintain proper nutritional status of the children.

For adolescent that is preparatory phase for family life should be proper family life education through different cultural programmes should be arranged.

People should be made aware about RTI and STI. Adolescent attitude should be changed regarding personal hygiene and menstrual hygiene.

All the above steps should be done in proper way with community participation.