Study on Assessment of Child Health Care Services in Haryana

A dissertation submitted in partial fulfillment of the requirements for the award of

Post-Graduate Diploma in Health and Hospital Management

By

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Certificate of Internship Completion

TO WHOM IT MAY CONCERN

This is to certify that Mr. **Vinod Goyal** has successfully completed his internship in our organization from January 12, 2012 to May 31, 2012. During this internship he has worked on project "Assessment of child health care services in Haryana" & also co-ordinated for the HBPNC Programme under the guidance of me and my team at National Rural Health Mission, Haryana.

We wish him good luck for his future assignments.

Sh. Pradeep Kumar
Director (Administration)

Certificate of Approval

The following dissertation titled "**Assessment of child health care services in Haryana**" is hereby approved as a certified study in management carried out and presented in a manner satisfactory to warrant its acceptance as a prerequisite for the award of **Post- Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name	Signature
DR. NITISH DOGRA	
PRAGYA T. GUPTA.	

3.

Certificate from Dissertation Advisory Committee

This is to certify that **Mr.Vinod Goyal**, a graduate student of the **Post- Graduate Diploma in Health and Hospital Management**, has worked under our guidance and supervision. He is submitting this dissertation titled **"Assessment of child health care services in Haryana"** in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management**.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

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ABSTRACT

ASSESSMENT OF CHILD HEALTH CARE SERVICES IN HARYANA

Despite all the efforts put by government as well as non-governmental institutes for 100% immunization coverage, there are still pockets of the vaccine preventable disease (VPD). As per SRS 2010 IMR of Haryana is 48/1000 live births. Universal immunization against six VPD by 2000 was one of the goals set in the National Health Policy (1983).It was a cross sectional study to estimate the coverage of immunization & various factors affecting the immunization status under UIP of children (12-23 months age) in two districts (Panipat & Yamunagar) of Haryana. WHO 30*7 cluster sampling technique was used. This study also discusses the coverage status of other child care services (ADD, ARI, HBPNC, Breast feeding status) in two districts of Haryana.This study was done under support from NRHM Haryana headquarter. Epidemiological data was collected via interview using structured questionnaire. Sample Size was 84 children with Sampling Unit Household. Analysis was done using EPI-INFO Software. In sample taken, 66.4 % were fully, 24 % were partially immunized, & 3.6 % were unimmunized. Coverage of BCG was 93 % , DPT1 was 94 %, DPT2 was 85.5 % & DPT3 was 86 % respectively. For measles coverage was 78.6 percent.AWC were found the major source of immunization. 18.5 % cases were unaware about the time & place of immunization, 15 % due to postponed till another time. Approx. one fourth of children were having diarrhea during last one month & in half of the cases pvt. doctor was consulted for treatment. Also 40% of deliveries were found to be conducted at home. In case of Institutional delivery, pvt.hospital is major place where delivery takes place. In almost 50 % of cases EBF was not done. Also the status of post natal visit was found very low(16 %). There is very much need of

involvement of community to get them aware about beneficiaries provided to them, so that they can get the services & resources utilized to maximum.

ACKNOWLEDGMENT

"Any accomplishment requires the grace of god as well as help and good wishes of many people and this work is not different."

This perspicuous piece of acknowledgement is an opportunity and humble privilege for me to express my deepest sense of gratitude and indebtness to those people without whose help, assistance and guidance, the present work would have been impossible.

I deem it the rarest life time opportunity to express my sincere and deepest sense of gratitude to **Sh.C.R.Rana, Mission Director, NRHM -Haryana** for giving me opportunity for the summer training in your esteemed organization and for his permission for this important study and also for his timely advice, supervision and moral support during my study period.

I extend my sincere thanks to **Dr. Narveer Singh (Directorate General of Health Services, NRHM-Haryana)** for his endeavor and genuine support. I express my gratitude to him for encouraging me at every moment throughout the period

I extend my sincere thanks to Sh. **Pardeep Kumar (Director Admin., NRHM-Haryana)** for his endeavor and genuine support. I express my gratitude to him for encouraging me at every moment throughout the internship period.

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I am highly indebted to **Dr. L.P. Singh (Director, IIHMR, New Delhi) & Dr. S.K.Patel (Associate professor IIHMR, New Delhi**) for their valuable advice, help and encouragement during the study period. I gratefully acknowledge the assistance and critical remarks rendered by faculty members to bring it in effect.

I must render my sincere thanks to the **DIO's of these four districts** for their cooperation and support. I am also thankful to CMO's of these districts for their support.

My obligations are especially to my parents from whom I learnt the art of dedication, sincerity and patience, which has helped me throughout the work period. Their love and blessings were and will remain my constant guide.

Place: Panchkula **Mr. Vinod Goyal**

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Abbreviations

VHSC	Village health sanitation committee
MMR	Maternal mortality ratio
IMR	Infant mortality rate
U5MR	Under 5 mortality rate
PNDT	Pre natal diagnostic test
HBPNC	Home based post natal care
ADD	Acute diarrheal disease
ARI	Acute respiratory disease
OPV	Oral polio vaccine
DPT	Diphtheria pertussis tetanus
TT	Tetanus toxoid
NFHS	National family health survey
DLHS	District level health survey
SRS	Sample registration system
RCH	Reproductive child health
VPD	Vaccine preventable disease
SC	Sub centre

PART 1: INTERNSHIP REPORT

1. ORGANIZATION PROFILE

A. Introduction

The National Rural Health Mission seeks to provide effective health care to rural population throughout the country. It aims to undertake architectural correction of the health system to enable to effectively handle increased allocations as promised under the National Common Minimum programme. It has as its key components provision of a female health activist in each village; a village health plan prepared through a local team headed by the Health & Sanitation Committee of the Panchayat. It aims at effective integration of health concern with determinants of health like sanitation & hygiene, nutrition, and safe drinking water through a District Plan for Health.As per mandate under NRHM the State Health Society has been reconstituted under the Chairmanship of Chief Secretary, Haryana adopting multi department approach and involvement of all stake holders.

- ✓ Mission – Mission of NRHM is to improve the quality of life of people by providing better Health Services. It strives to help people improve their productivity and reduce risks of diseases and injury in a cost-effective way.
- ✓ Vision--NRHM seek to establish long-term relationships with groups and individuals to enable them to continue to work to achieve optimal health. It delivers cost-competitive health promotion services with patient's satisfaction and accountability.

Structure of State Health Mission (NRHM)

B. Some of functions and duties of health department:

Health department has manifold functions and duties which are as under:-

1. Provide promotive , preventive , curative and rehabilitative services to the community through primary health care delivery system.
2. Provide equitable and quality health care at primary, secondary and tertiary level.
3. Extension, expansion and consolidation of rural health infrastructure.
4. Respond to the local community health needs and request.
5. It takes many steps for population stabilization.
6. Provide Reproductive and Child Health Services with the objective of reducing MMR & IMR.
7. Provide immunization services against vaccine preventive diseases of childhood as well as pregnant mothers against tetanus during child birth.
8. Provide Family Welfare Services.
9. Provide Essential Obstetric Care.
10. Enforcement of PNDT Act to prevent Sex Determination.

C. Programme Implementation Plan for 2012-13

State of Haryana has made steady progress in NRHM implementation during first phase of NRHM (2007-2012). State has now reached the stage from where it requires taking a leap forward. There has been considerable increase in the funds absorption capacity over the last few years, particularly after 2008-09. NRHM have however identified certain loose ends which need to be tightened up in the next phase. 2012-13 continues to retain the proposal of 2011-12, barring few structural changes necessitated by sub optional achievement in certain areas.

Program management needs a revamp both at state and district level. While on one hand state is averse to creating extra posts under NRHM but on the other this need people who can manage the program at district and sub district level. Community processes and main streaming of AYUSH have been weak areas. This year NRHM is proposing to link these two weak areas to strengthen both of them. It is proposed that MO (AYUSH) will function as community process manager at block level to look after ASHA, SMS, IBSY and HBPNC programs. AYUSH doctors otherwise well equipped to handle such programs have been underutilized. They will be paid extra honorarium for community process work.

ASHA program in Haryana has started moving; there has been increasing realization that if ASHA moves everything else would move along with it. There are two structural changes proposed this year in ASHA program: first, there will be an ASHA

supervisor from among the best performing ASHA at PHC level who will be paid extra honorarium for the work and second, there will be increased honorarium for ASHA for ensuring service delivery to SC and BPL population. In 2012-13, proposing 3000 new ASHAs in rural areas according to population norms. It is also proposed to have ASHA in urban areas to provide much needed extension services in urban slums.

State has proposed a new weekly Iron Folic Acid supplementation (WIFS) program for adolescent girls in colleges in all the districts. This will supplement the efforts of Indira Bal Swasthya Yojana (IBSY) for controlling anemia in children and adolescents.

Analysis of expenditure in last few years has revealed that while salary component has been almost fully utilized, the expenditure in services and procurement has not been commensurate. In new PIP, it has been proposed to link honorarium with performance- there will be fixed component of honorarium which will be same as in last PIP plus a variable component which will be based on performance and can go up to 50 percent of the fixed honorarium. State has proposed to bolster its procurement wing to cut down delays in procurement.

2. **THE DIVISION WHERE I WAS ENGAGED IN WITH ASSIGNED RESPONSIBILITY**

During the four months of working period in the office, I mainly co-ordinated for the HBPNC Programme in child health division. I was involved in below mentioned activities.

i) Arrangement & proof reading of resource material of HBPNC as per 3 tier supervisory model proposed by Haryana (material adopted by Haryana Govt. from UNOPS-NIPI).

ii) Co-ordination for HBPNC Programme at state. (HBPNC Training of trainers & issues related to HBPNC).In this I mainly co-ordinated for Trainings & programme implementation plan

A. Introduction about HBPNC

As you are aware that Home Based Post Natal Care (HBPNC) has been initiated for the mother and her newborn by Govt. of India to fill up the gaps in the "Continuum of Care". The HBPNC model consists of a range of interventions that are packaged for delivery at different times during pregnancy, childbirth and after birth in the community setting; and links home based care with facility based care through timely identification of complications and its referral. HBPNC Phase I have already been rolled out in the entire state.

The HBPNC Package has been developed by a committee of experts constituted by the Ministry of Health and Family welfare, Government of India. The committee members included members from professional bodies like the Indian Academy of Pediatrics (IAP) and the National Neonatology Forum (NNF), Development Partners, Heads of the Department of Pediatrics' from Medical colleges and field level experts.

HBPNC Phase-I Three batches of HBPNC Phase-I ToT was organized at district DTC Faridabad during 2010-11. In phase I DTO/DIO, Designated MO, DPM, Nursing Tutor etc. from each district were trained. Total no. of 92 trainers were trained in three batches. Training of Trainers on Home Based Post Natal Care-Phase-II from *13th March to 21st March 2012. HBPNC Phase-II:-*

Three batches of Training of Trainers on HBPNC Phase-II were organized at SIHFW, Panchkula from 13th March 2012 to 21st March 2012. It was made sure that all the participants which were trained in HBPNC Phase-I would be trained in Phase-II. Introductory session was done in all three batches in which Dr. Usha Gupta, Principal, SIHFW, Dr. Suresh Dalpat, Dy. Director Child Health, Haryana, Mr. Chand Singh Madaan State NGO Coordinator & Dr. Avinash Jaiswal from NIPI interacted with the participants and briefed them about the objective of

the training. Introduction of participants, Objective of the ToT, Sharing of Feedback on HBPNC visits of ASHAs. First half of the ToT started with the following objective:

- ✓ Ice breaking & familiarization with each other: - All the participants introduced themselves and share their experience about HBPHC-I.
- ✓ Quick revision of activities done & skill gained during 6 days HBPNC orientation .Participants shared their experiences about HBPNC Phase-I done at Faridabad during 2010-11.

Familiarization of the trainers with the Supervisor Manual: -

All the participants were given the Supervisor Manual and the Guest Faculty briefed them about the manual. Orientation of the trainers about ASHA supervisory mechanism & methodology to conduct trainings for ASHA supervisors.

Methodology adopted: -

Lecture & Discussion on feedbacks of HBPNC visits of ASHA.

Pre Test of the Participants: - Pre Test of the participants was done in the first session of the first day.

11:00 AM to 4:00 PM Revision and understanding of training methodology of section 1-19.

Strategy for HBPNC Phase-II training at District level: -

After completion of the HBPNC ToT at State level, it was decided that at District level the following methodology will be adopted: -

 01 Day HBPNC Orientation of BTFs by the HBPNC Master Trainers at the District level. Category of the participants would be SMO, MO, LHV, BEE, PHN, etc.

 05 Days Training of ASHAs (Round-II) by the Block Training Facilitators (BTFs) at the Block level.

 02 Days HBPNC Supervisors Training by the HBPNC Master Trainers at District Levels and the level of participants would be Supervisors (ASHA Facilitator at PHC, Block ASHA mobilizer at CHC, District co-ordinator at District).

3. MANAGERIAL TASKS I DID WITH RESPECT TO THE DEPARTMENTS

During the four & half months of working period in the office, I mainly co-ordinated for the HBPNC Programme. Also, I was involved in below mentioned activities.

i) Arrangement & proof reading of resource material of HBPNC as per 3 tier supervisory model proposed by Haryana (material adopted by Haryana Govt. from UNOPS-NIPI).

ii) Co-ordination for HBPNC Programme at state. (HBPNC ToT & issues related to HBPNC).

iii) Co-ordination for planning further training of HBPNC in the field.

iv) Acted as a mentor of Yashoda ToT-2nd batch held in Faridabad also.

v) Regular co-ordination with districts for upcoming trainings, previous years RI Training Reports etc.

vi) To a little bit extent I also assisted in preparation of child health PIP 2012-13.

vii) I also attended review meetings of CMO, Continuous 9 day HBPNC ToT & also aware with points discussed in IMR reduction workshop in January.These provided me a lot of knowledge & a platform to learn.

viii) Recently doing a monitoring survey on assessment of child health care services in Panipat, Yamunanagar, Hisar & Kaithal.

4. LEARNINGS IN INTERNSHIP TIME

1. I came to know about various health programmes managed by the organization.
2. Work culture in govt. organizations as we think, is not the same everywhere. In NRHM Haryana there is lot of preesure of work in most of departments .
3. This provided me an opportunity to field exposure .
4. I came to know the harsh reality of health conditions prevalent in Haryana state.
5. Currently, co-ordinating for HBPNC Programme at state. (HBPNC ToT & issues related to HBPNC).
6. I was the initiator of project I took over there, in future this project will be held in all other districts of Haryana. Also the Internship topic I did is a new initiative by NRHM. All this give me a confidence & innovative approach to find out new things.
7. Research type activities are very less held in NRHM, Haryana. This project by me created a niche in NRHM to think about the involvement of Researchers & health managers in their organization.
8. I also attended review meetings of CMO, Continuous 9 day HBPNC ToT & also aware with points discussed in IMR reduction workshop in January. These provided me a lot of knowledge & a platform to learn.
9. Last but not the least, I came to know that career in public health management is not as easy.

PART 2
DISSERTATION REPORT

INTRODUCTION

Although India is a leading producer and exporter of vaccines, the country is home to one third of the world's unimmunized children. Fewer than 44 percent of India's young children receive the full schedule of immunizations. India's vaccine deficit has several causes: little investment by the government; a focus on polio eradication at the expense of other immunizations; and low demand as a consequence of a poorly educated population and the presence of anti-vaccine advocates. India lags behind other countries of similar per capita gross domestic product in child survival. The mortality rate for children age five and younger currently stands at sixty-six per thousand live births, compared to thirty-four per thousand live births in the Philippines- a country with roughly the same per capita gross domestic product. Although child survival rates have improved since 2001, India will not achieve its own goal of reducing the number of infant deaths by half before 2012. And at the current rate of decline, it will not meet the goal that was set in the Millenium development Goal 4 of cutting the mortality rate for children under age five by two thirds between 1990 and 2015. The 9.6 million unimmunized children in India today account for more than one-third of the 27 million unimmunized children around the world. In 1978 the Indian government launched its Expanded Programme for Immunization. In 1985 the program was re launched as the Universal Immunization Program, with the goal of extending six basic vaccines to all infants and the tetanus vaccine to pregnant women. The immunization schedule was changed to include measles, and the typhoid vaccine was dropped. UIP become a part of the Child Survival and Safe Motherhood (CSSM) Programme in 1992 and Reproductive and Child Health (RCH) programme in 1997.In 2006 hepatitis B and Japanese encephalitis vaccines were introduced in selected parts of the country. The National Technical Advisory

Group on Immunization, which was established by the Ministry of Health in 2002, is the primary technical advisory group on vaccines to the national government. Pneumonia remains the leading killer of children in India; it accounted for 371,605 deaths in children under age five in 2008.However, assessing the burden of pneumococcal disease through routine surveillance remains a technical challenge in resource poor settings. In 2009 the National Technical Advisory Group on Immunization recommended using a pentavalent vaccine- a combination of five vaccines in one injection- consisting of diphtheria, tetanus, pertussis, hepatitis B, and Hib antigens. Subsequently, the GAVI Alliance authorized $165 million to help introduce a combination vaccine in ten states in India.19 A recent study estimated that a rotavirus vaccination program using a 50 percent effective vaccine at the GAVI Alliance price of fifteen cents a dose would prevent 44,000 deaths and $206 million in treatment costs each year.22 Although the rotavirus vaccine has been discussed by the technical advisory group, there has been no proposal to date to introduce this vaccine into India's immunization program. Despite all the efforts put by government as well as non-governmental institutes for 100% immunization coverage, there are still pockets of the vaccine preventable disease[1]. There are few population-based studies on the factors associated with immunization coverage from our country[6.]One of the major reasons for not achieving 100 percent routine immunization is the focus on campaign mode programmes in Health and Family Welfare. The Department of Family Welfare has now taken up a scheme for strengthening of routine immunization. Efforts must be made to strengthen routine immunization programme especially in the underprivileged groups and areas such as slum in cities so that target of universal coverage can be achieved as envisaged at national level .In this report we describe Haryana's immunization deficit and recommend that the government move quickly to strengthen national immunization programs. **The study aims to estimate the immunization coverage of BCG, the**

primary dose of OPV3, DPT3 and Measles among children in age group 12-23 months in two districts of Haryana. The various factors affecting the immunization status of the children will also be discussed.

Acute respiratory infections (ARI), Acute Diarrheal Diseases (ADD) are contributing to an increasingly important impact on health of children. Diarrhea Disease is widespread all over the world, not only threatens human health but also greatly affects society and economy. The fatality rate by Diarrhea Disease highly ranks fourth among all the diseases, only lower than tumor, Cardiovascular or Cerebral vessels diseases and diabetes mellitus, things are worse in developing countries and low income countries, and it has became one of problems of the global major public health. WHO treats the control of Diarrhea Disease as global strategy, and the scheme of control of Diarrhea Disease was enacted in May, 1978.

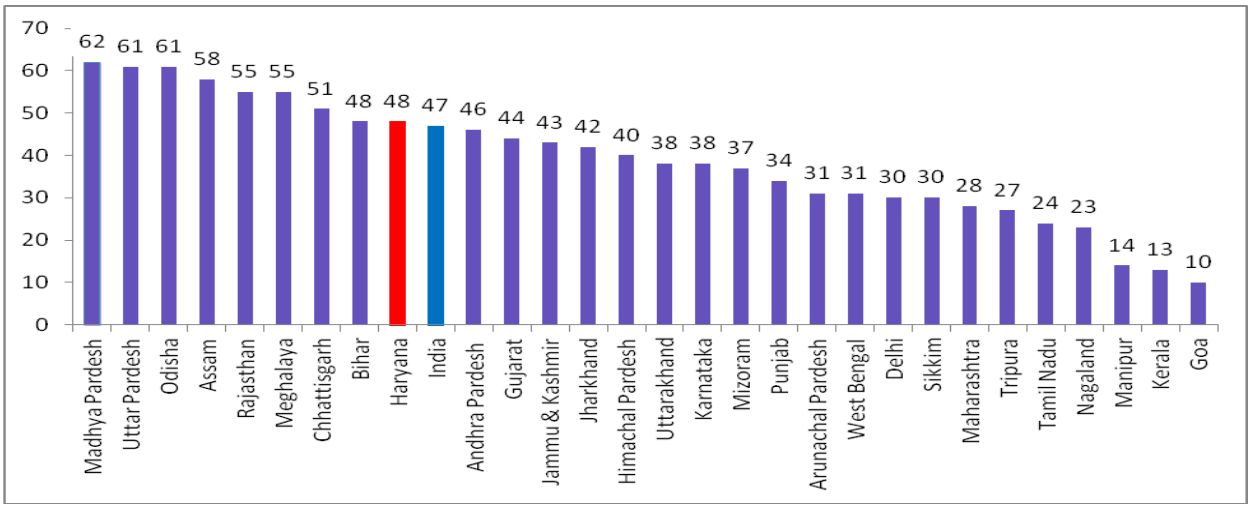
About 20% of all deaths in children under 5 years are due to Acute Lower Respiratory Infections (ALRIs - pneumonia, bronchiolitis and bronchitis); 90% of these deaths are due to pneumonia. Low birth weight, malnourished and non-breastfed children and those living in overcrowded conditions are at higher risk of getting pneumonia. Mortality in under 5 years in India due to ARI is 19 % & due to ADD is 17 %. Due to ARI 3.9 mil deaths in young children worldwide. India, Bangladesh, Indonesia and Nepal account for 40% global deaths of ARI. Prevalence of diarrhea among under five is 29.9% .Morbidity in India due to diarrhea in under 5 children is 57.5%. **This study also discusses the coverage status of other child care services (ADD, ARI, HBPNC, Breast feeding status) in two districts of Haryana.**

SITUATIONAL ANALYSIS AND PROGRESS OF HARYANA

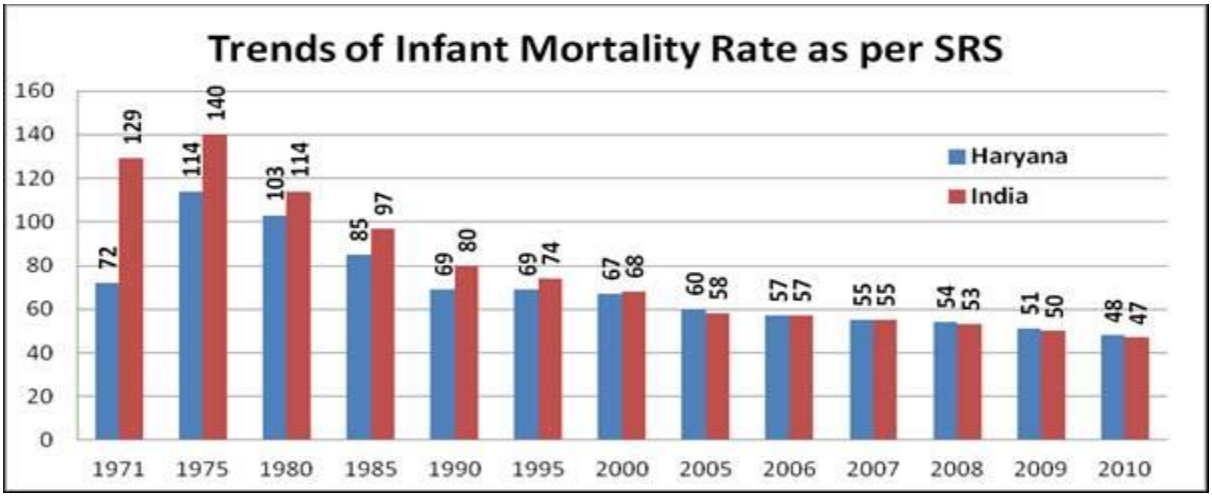
Under-five mortality reduction is the key millennium development goal. The infant mortality is the major contributor in U5MR which is 48 for Haryana as per SRS 2010.The IMR is an important indicator of Child Health. As per NFHS-III survey, the IMR of Haryana is 42/1000 live births and SRS 2010 it is 48/1000 live births. Neo-natal mortality (NMR) for Haryana as per SRS2008 is 34 and accounts for 63% of the IMR. The goal to reduce IMR will only be achieved if comprehensive facility based neo-natal care strategy is implemented in Haryana backed up by Home Care & Timely referral.

Indicator	**Status**
1. IMR (SRS 2010) Haryana	48
2. Goal : Overall by 2012 (National)	30
3.Goal:Annual 2011-2012(Haryana)	45

Ref:-*Ministry of Home affairs Govt. of India,Census of India-Vital statistics,SRS Bulletins*



Haryana stands at number 17 (IMR 48) in comparison to other states as far as IMR is concerned as per SRS 2010.



There has been continuous decline in IMR in last two decades but in the last few years there has been stagnation in decline, as can be seen in the table above.

A data on the causes of death in infant reveals that sepsis, prematurity and low birth weight, birth asphyxia, respiratory distress, congenital malfunction, diarrhea of the new born and birth injury are broad categories that account for more than 80% of the infant deaths in Haryana. A large number of these deaths can be prevented by providing better ante-natal maternal services, safe delivery practice and promoting Facility Based Neonatal Care (FBNC) and Home Based Neonatal Care (HBNC).

UIP SCHEDULE

Age	Vaccines
Pregnant Women	**TT (2 doses/Booster)**
Birth	**BCG, OPV-O, Hep B**
6 weeks	**DPT -1, OPV -1, Hep B**
10 weeks	**DPT -2, OPV -2, Hep B**
14 weeks	**DPT -3, OPV-3, Hep B**
9 months	**Measles**
16-24 Months	**DPT booster, OPV – Booster, MR, JE***
5 years	**DPT Booster 2**
10 years	**TT**
16 years	**TT**

According to National Family Health Survey (NFHS) Percentage of children 12-23 months who have received all recommended vaccines[3, 4,5].

NFHS-1 (1992-93) =36%, NFHS-2 (1998-1999) =42%, NFHS-3 (2005-2006) =44%

Ref*:-NFHS-3. International Institute for Population Sciences, Mumbai, 2005*

Percentage of children 12-23 months who have received BCG, OPV3, DPT3 and measles vaccines[5].BCG =78%, Polio3 =78%, DPT3 =55%, Measles =59%.

Coverage of Universal Immunization Program
DLHS3(2007-08)

Coverage	States/UT
Low(<50%)	**Uttar Pradesh, Meghalaya, Madhya Pradesh, Tripura, Arunachal Pradesh, Bihar, Manipur and Rajasthan**
Medium (50-70%)	**Mizoram, Assam, Jharkhand, Gujarat, D & N H, Chhattisgarh, Odisha, Jammu & Kashmir, Uttarakhand, Andhra Pradesh, Delhi and Maharashtra,Haryana**
High (>70%)	**Chandigarh, West Bengal, Karnataka, Sikkim, Kerala, Punjab, Pondicherry, Himachal Pradesh, Tamil Nadu, Lakshadweep, A & N Islands, Daman & Diu and Goa**

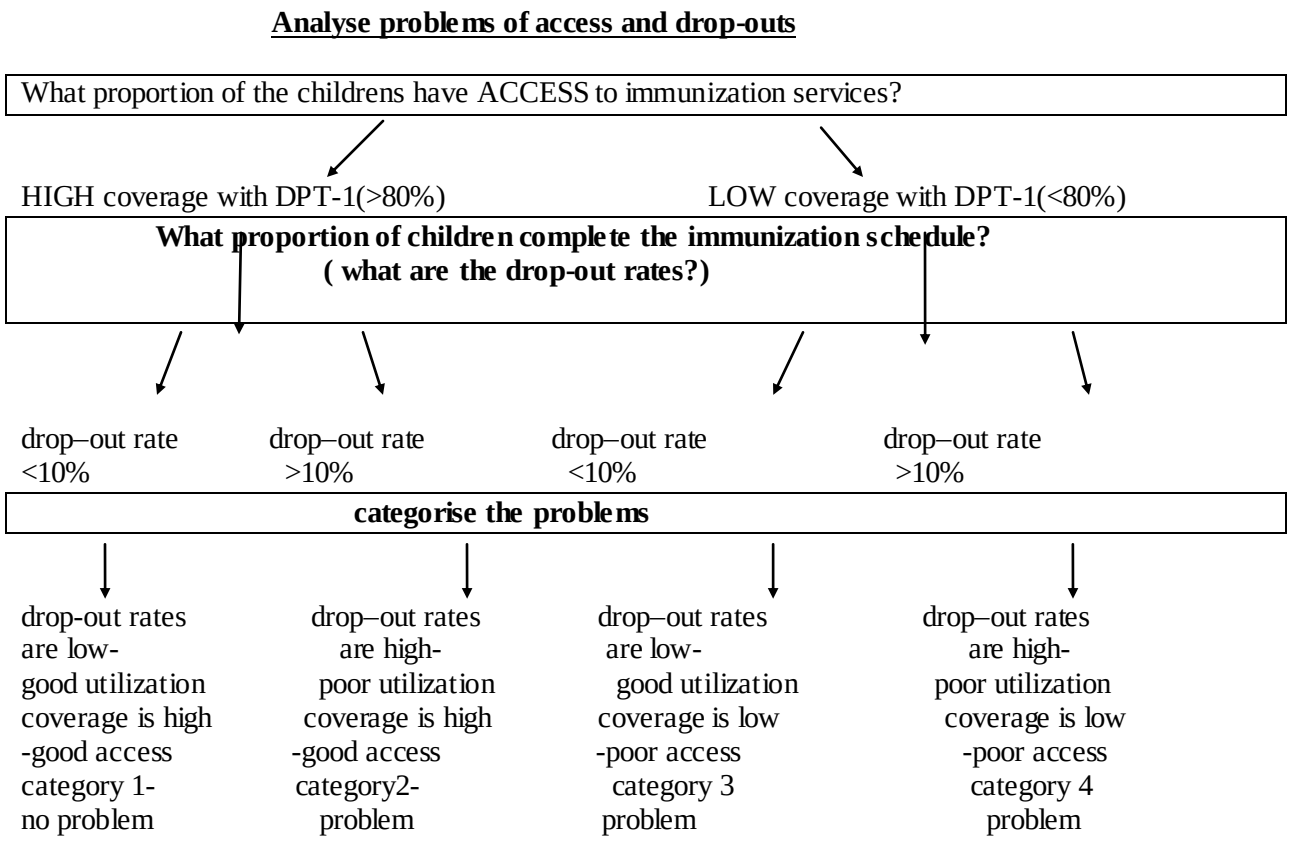
Ref:- *Health Information of India, District level household survey 3, Ministry of Health & Family Welfare, Govt. of India, New Delhi*.

The coverage of full immunization was decreased from DLHS-1 to DLHS-2 (66 to 59 percent) and has increased only one percent point in DLHS-3. The coverage of full Immunization of children was below 50 percent in 2 districts of Haryana, Mewat (11 percent) and Faridabad (46.4 percent).

Reasons for immunization failure- That is, why people do not come or do not return for immunization. This is important because it will help to find ways to increase immunization coverage. Routine reports from health centres also provide important information about immunization coverage. However, immunization coverage estimates based on health centre records may be inaccurate or misleading. A coverage survey can validate the results of routine reports and provide additional information. For example, health centre records may indicate that 80% of the children in a community were immunized, but would not show that

30% of these children had been immunized at the wrong ages. Nor would it show how many children were immunized by other providers of health care. An advantage of a coverage survey is that it tells how many people were immunized *correctly,* and how many were immunized by other providers.

Information obtained from an immunization coverage survey should be used at all levels of the health system. Information provided by the immunization coverage survey helps to evaluate the performance and find ways to improve the immunization activities. Immunization coverage estimates can also be used to estimate reductions in morbidity and mortality from the vaccine-preventable diseases. (However, providing immunizations does not guarantee these reductions.)



In Haryana, the institutional delivery had increased from 26 percent in DLHS-1 (1998-99) to 35 percent in DLHS-2 (2002-04) and 47 percent in DLHS-3 (2007-08). Forty-seven percent of deliveries since Jan 1, 2004, which results either in still or live births were done in health facilities, either public or private.

In DLHS-3 More than three-fourths (80.8 percent) of children under 3 years, born after January 1, 2004 were fed with colostrums. Less than one-fifth (16.5 percent) of women had initiated breastfeeding within one hour of birth of the child. More than half of the children (55.4 percent) started breastfeeding within 24 hours of birth. The initiation of breastfeeding within one hour of birth was least practiced among women in Mewat (7.5 percent) and most widely practiced in Rewari (33.3 percent). The proportion of youngest surviving child who had exclusively breastfed for 6 months was 9.4 percent. (As per DLHS-3).

Universal Immunization Programme (UIP)

The UIP was taken up in 1986 as National Technology Mission and become operational in all districts in the country during 1989-90. UIP become a part of the Child Survival and Safe Motherhood (CSSM) Programme in 1992 and Reproductive and Child Health (RCH) programme in 1997.

Under the Immunization Programme, infants are immunized against tuberculosis, diphtheria, pertussis, poliomyelitis, measles and tetanus. Universal immunization against six vaccine-Preventable Diseases (VPD) by 2000 was one of the goals set in the National Health Policy (1983). This goal however has not been achieved[2]. Available data from service reporting indicate that there had not been any improvement in the coverage during the nineties. This has been a source of concern. However, reported cases of vaccine preventable diseases have declined over the same period[5].

One of the major reasons for not achieving 100 percent routine immunization is the focus on campaign mode programmes in Health and Family Welfare. The Department of Family Welfare has now taken up a scheme for strengthening of routine immunization.

Efforts must be made to strengthen routine immunization programme especially in the underprivileged groups and areas such as slum in cities so that target of universal coverage can be achieved as envisaged at national level[8,]

By seeing all this that health indicators of Haryana state are poor, a need to find coverage & to evaluate the effective operation of programmes, this project was initiated.This Coverage survey is useful when no routine immunization reports are available in an area or to confirm the reliability of the existing reports. Provide information on the delivery and impact of immunization services.

Assessments should be planned so that they yield information targeting population groups and delivery services where corrective actions are needed. Immunization remains one of the most cost-effective methods to reduce child mortality. Subnational surveys may be more desirable than a single national assessment. Subnational assessments have, however, to be undertaken uniformly and in as short a time as possible, and must cover the whole country if they are to be used to obtain a national figure. Individual subnational surveys, for example a district level survey, may be done to provide information on immunization services in those specific districts.

REVIEW OF LITERATURE

Roughly 3 million children die each year of vaccine preventable diseases (VPDs) with a disproportionate number of these children residing in developing countries. Vaccines remain one of the most cost-effective public health initiatives, yet the cover against VPDs remains far from complete; recent estimates suggest that approximately 34 million children are not completely immunized.

Almost 98 percent of these 34 million children who are not completely immunized are residing in developing countries. Vaccination coverage in India is also far from complete despite a longstanding commitment to universal coverage. A recent evaluation of VPD coverage in India found that 18 million children did not receive any coverage in 2001-2002. In India, immunization has been a central goal of the health care system from the 1970s, first through the Expanded Programme on Immunization (EPI) in 1978, and later with the universal immunization programme (UIP) since 1985. Constitutionally, health care is on the State's list of responsibilities and is financed by the State. The UIP is an exception; it is one of the few 100 per cent centrally sponsored family welfare programmes and provides support for vaccine storage, training of medical and paramedical staff, and all infrastructure needs specific to delivering immunization to infants at the village level .Throughout the 1980s, gains in immunization coverage proved to be rapid for all VPDs; some VPDs showed gains from below 20 per cent coverage to over 60 per cent coverage by the early 1990s. Pulse polio immunization (PPI) campaign initiated in 1995, was successful in significantly increasing first-dose polio immunization coverage, however, there were limited gains in complete coverage for polio vaccines. Moreover, coverage of non-polio vaccines seemed to have remained unaffected by the PPI campaign. This limited success in expanding full coverage for VPDs has renewed the search of ways to expand coverage

effectively. A natural place to start was by studying the strengths and weakness of the current vaccine delivery system through the rural health infrastructure in India. India's rural health care system has a strong dependence on community health infrastructure and outreach, particularly in villages.

Community health infrastructure has been shown to be an important correlate of health outcomes in other developing countries. In the Indian context, two studies have examined the role of health infrastructure (Ashlesha Datar, Arnab Mukherji* & Neeraj Sood).

In a study done by Rashmi Sharma, Vikas K Desai, Abhay Kavishvar in Surat (Assessment of immunization status in the slums of Surat by 15 clusters multi indicators cluster survey technique). It was found that only 25% of the children between the ages of 12 and 23 months were fully immunized; coverage was highest for BCG (75%) and lowest for measles (29.9%). As far as the dropout rate is concerned, it was 60.2%, 31.9%, and 31.5% for BCG to measles, DPT_1 to DPT_3, and OPV_1 to OPV_3 respectively.

In another study done by Naveen K.Goel in Chandigarh (Status Of Routine Immunization In Chandigarh, India) Out of these 448 (86.4%) children were fully immunized, 60(11.5%) were incompletely immunized and 10(1.9%) were completely unimmunized. Immunization rate was 90% for male children whereas it was 80% for female children.

In one more study done in Kashmir by Bukhari S, Gaash B, Ahmad M (2008-05 - 2008-06)- Routine Immunization Coverage of Children in a Rural District of Kashmir), it was found that The total number of infants aged 12-23

months was 544, forming 2.14% of the total population. The data showed that 70.89% of them were fully immunized, 26.85% partially immunized and 2.20% un-immunized. Male children formed 57.46% of the studied children, of whom 10.20% had dropped out with DPT II and 21.21% with DPT III, attrition increasing to 39.39% each with measles and booster doses of DPT and Polio Female children formed 42.53 percent of the studied 12-23 month olds, of whom 34.48 percent had dropped outs. Five percent of girls had not even got the DPT Ist dose, while 12.5% fell out with DPT 2nd, 27% were lost at DPT III, and 65% did not get measles vaccination. All (100%) remained without any booster doses of DPT and oral polio vaccine.

In a study of Diarrhea management among under five by B. Banerjee, S. Hazra and D. Bandyopadhyay to assess the magnitude of the problem of diarrhea and time of initiation of its management in under five children of different socio economic status, in an urban area of West Bengal, Overall prevalence of diarrhea was 31.67%, highest in lower socio economic class (41%). Prevalence was higher in the girls, though not significant. Acute watery diarrhea was most common (58.9%), followed by dysentery (24.2%) and persistent diarrhea (16.9%). Persistent type was inversely proportional to socioeconomic status. Majority of mothers administered fluids or sought treatments within six hours in the middle socioeconomic class but beyond six hours in lower socioeconomic group ($P < 0.001$). Percentage of children where doctors advice was implemented within 12 hours was inversely proportional to socio economic status ($P < 0.001$).

In a study of Acute Respiratory Infections in Children: A Community-based Longitudinal Study in Rural Bangladesh by K. Zaman[*], A. H. Baqui, Md[****], Yunus[*], R. B. Sack[*] & others .A community-based longitudinal study conducted in Matlab, a rural area in Bangladesh, investigated acute respiratory infections (ARI)

among children. A cohort of 696 children under 5 years of age was followed for 1 year yielding 183,865 child-days of observation. The overall incidence of ARI was 5.5 episodes per child-year observed; the prevalence was 35.4 per hundred days observed. Most of the episodes (96 per cent) were upper respiratory infections (URI). The incidence of acute lower respiratory infections (ALRI) was 0.23 per child per year. The incidence of URI was highest in 18–23-month-old children, followed by infants 6–11 months old. The highest incidence of ALRI was observed in 0–5-month-old infants followed by 12–17-month-old children. The study documents ARI to be a major cause of morbidity among rural Bangladesh children).

Acute respiratory infections in children: a study of knowledge and practices of mothers in rural Haryana by N K Saini, D R Gaur, V Saini, S Lal. In the study, data were collected on knowledge and practices of mothers in two villages of Block Beri of district Rohtak for devising a standard management plan. In all 304 mothers were interviewed. About 23 per cent mothers recognised pneumonia by fast breathing and 11.2 per cent recognised severe pneumonia by chest in drawing. Only 1.3 per cent mothers knew infective origin of ARI. Primary Health Centre was the most frequented place for treatment of ARI.

RATIONALE OF STUDY

- To discuss the immunization coverage, prevalence of ARR & ADD with the local authorities.
- Status of HBPNC & health seeking behavior prevalent in community would be discussed.
- Various factors would be discussed with authorities to reinforce the coverage and reducing factors impeding the coverage.
- This study will be held in all the other districts of Haryana by Child Health Department, NRHM. So a huge research is yet to be carried out in Haryana.

OBJECTIVES

General Objective:

TO ASSESS THE COVERAGE OF CHILD HEALTH SERVICES WHICH INCLUDES IMMUNIZATION, ACUTE DIARRHEAL DISEASES, ACUTE RESPIRATORY DISEASES, HOME BASED POST NATAL CARE & BREAST FEEDING PRACTICES AMONG 12-23 MONTHS CHILDREN IN TWO DISTRICTS OF HARYANA

Specific Objectives:

1. To estimate the coverage of immunization, under Universal Immunization Programme, of children (12-23 months age group) in two districts of Haryana.

2. To determine the factors affecting the immunization coverage under children 12-23 months in these districts of Haryana.

3. To estimate the prevalence of Acute Respiratory infections, Acute Diarrheal diseases among 12-23 months children in these districts.
4. To estimate the health seeking behavior for the 12-23 months population regarding the same.

5. To assess status of Home Based Post Natal Care among the community in terms of post natal visits.

6. To assess coverage of Child health services in terms of breast feeding practices & delivery place.

Operational definitions:

Full Immunization: A Child who has received one dose of BCG, three doses of DPT and OPV each and one dose of measles before one year of age.

Partial Immunization: A Child who missed any one or more of the above doses.

No Immunization: A Child who did not receive even a single dose of vaccine.

Household: Group of people normally living together and taking food from a common kitchen; normally means that temporary visitors are excluded but temporary stay always are included.

Caregiver: Parent/ grandparents/ any other relative/ any person who takes care of the child primarily.

Acute respiratory infection: (WHO)

- Both upper and lower respiratory tract infections with an acute episode of running nose, cough, ear discharge, hoarseness of voice, breathing difficulty or fast breathing with/without fever or chest in drawing.

Acute Diarrheal Diseases (WHO)

- Acute watery diarrhea with passage of 3 or more watery motions or a single large watery motion in a day with/without blood, vomiting or dehydration.

In infants: the mothers judgment that the child was passing more frequent liquid stools.

DATA & METHODS

This study was conducted to estimate the coverage of Child care services in children 12-23 month's age group in four districts of Haryana.

Materials & Methods

Study area- 30 clusters in the population of four districts of Haryana (8 clusters covered till 1st week of May)

Study Design - Cross-sectional study.

Study period –15th March 2012 –till 1st week of May

Study population- 7 children per cluster in the 12-23 month's age group whose care giver were available at home.

Inclusion criteria-A child of 12-23 months of age group, residing for 1 year or more in the area was included in the study.

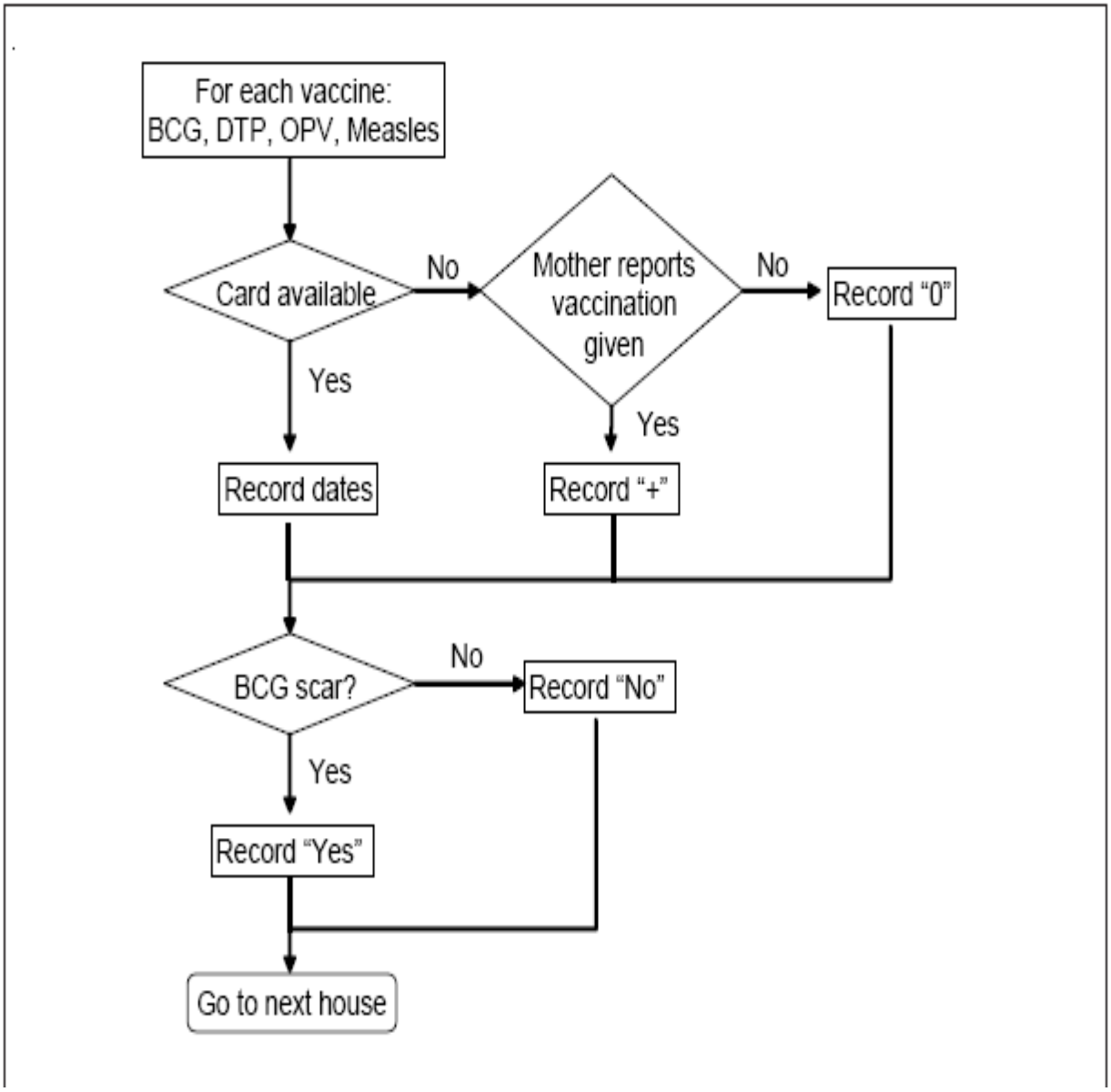
Sampling Frame – Caregivers of 12-23 months children in four districts of Haryana

Sampling Unit – Households

Sample Size - 210 children (84 covered till 1st week of May)

Study Tool –A pre-designed, pre-tested structured questionnaire**.**

Data Collection Technique –Clinical and epidemiological data was collected via interview using structured questionnaire.



Sampling technique:

WHO 30 cluster sampling technique, which is a kind of **two stage sampling**, was used to select the representative population of four districts of Haryana.

Cluster sampling technique:

This technique allows a small number of the target population to be sampled while providing data which are statistically valid. A "cluster" is a randomly-selected group which in this study contains at least 7 children in the age group to evaluate coverage. A coverage survey contains 30 clusters and meets the following standards of reliability: the age range of children aged 12-23 months for evaluating the immunization coverage among *children* against the six target diseases The results of the survey will have a level of accuracy of within plus or minus 10%. For example, if the survey shows immunization coverage of 70% in the sample, the coverage in the target population will be between 60% and 80%. The level of confidence is 95%, which means that nineteen out of twenty times the data which results from the survey will be within the stated level of accuracy (i.e., plus or minus 10%).In most developing countries children in the age range of 12-23 months constitute approximately 3% of the total population. If all children were present, we need a community of about 500 people to be sure to find at least 7 children in this age range. Because of absenteeism, we may need a larger population to find 7 children in the age range 12-23 months. Therefore, for practical reasons, plan to conduct a 30 cluster coverage survey in a population, or section of a population, greater than 30000.

First stage:

At the first stage, a list of villages along with their population was taken from four districts. The steps for cluster formation are as follows (with reference to Table):

1) All villages included in the immunization target area to be evaluated were listed and the most up-to-date individual population of each village was taken (as in column 5 of Table).

2) The cumulative populations of each community was calculated and written in column 6. (To obtain a cumulative population, the population of the next village was added to the combined total of all populations in preceding villages. The final cumulative population was the same as the total population to be surveyed.

3) The sampling interval was calculated by dividing the total population to be surveyed by the total number of clusters (30), rounding off the result to the nearest whole number. The sampling interval for villages under four districts for 30 clusters was 123989.

Sampling interval = Total population to be surveyed / Number of clusters

4) A random number was selected which was less than or equal to the sampling interval**.** The number has the same number of digits as the sampling interval. The random number selected for this study was 108713.

5) The village, in which cluster 1 was located, selected by locating the first listed village in which the cumulative population equals or exceeds the random number was written in the next column entitled "Cluster numbers". In this Table, the first cluster falls within village Gumthala Rao.

Cluster 1 population = Random number

6) The village in which cluster 2 was located, was calculated by adding the sampling interval to the random number .The cumulative population listed for that village was equal or exceeded the number calculated .The second cluster, for this data falls in Kunjal.

Cluster 2 population = Sampling interval + Random number

7) For subsequent clusters (cluster 3, cluster 4, cluster 5, etc.), the village in which that cluster was located was identified by adding the sampling interval to the running total.

Cluster (3,4…..) population = Sampling interval + Running total

8) The cumulative population listed for that village was equal or exceeded the number calculated. So the cumulative population for cluster 3 was identified in Darwa Majri.

Cluster 3 population = Sampling interval + Cluster 2 population
Cluster 4 population = Sampling interval + Cluster 3 population

If a single village contain more than one cluster, the clusters were not overlapped and were individually identifiable.

Second Stage:

In the second stage, 7 children from each of the selected clusters were selected.

Description of selection of household from the cluster:

- In each of the selected cluster, after reaching the center of the cluster a bottle was rotated.
- The direction of the mouth of that bottle was followed for selection of the path.
- The last digit of the serial number of the currency note was looked for the selection of a random number.
- By doing this the first household was selected from which the survey was started.
- From each cluster, 7 children were selected and if all the 7 children cannot be found in the selected cluster then the survey was continued, taking children from adjoining cluster till the 7 children are found.
- In households with more than one eligible child, data was collected on the *youngest* eligible child only.

Data Analysis – The data was analyzed using statistical Software and EXCEL.

Ethical Issues

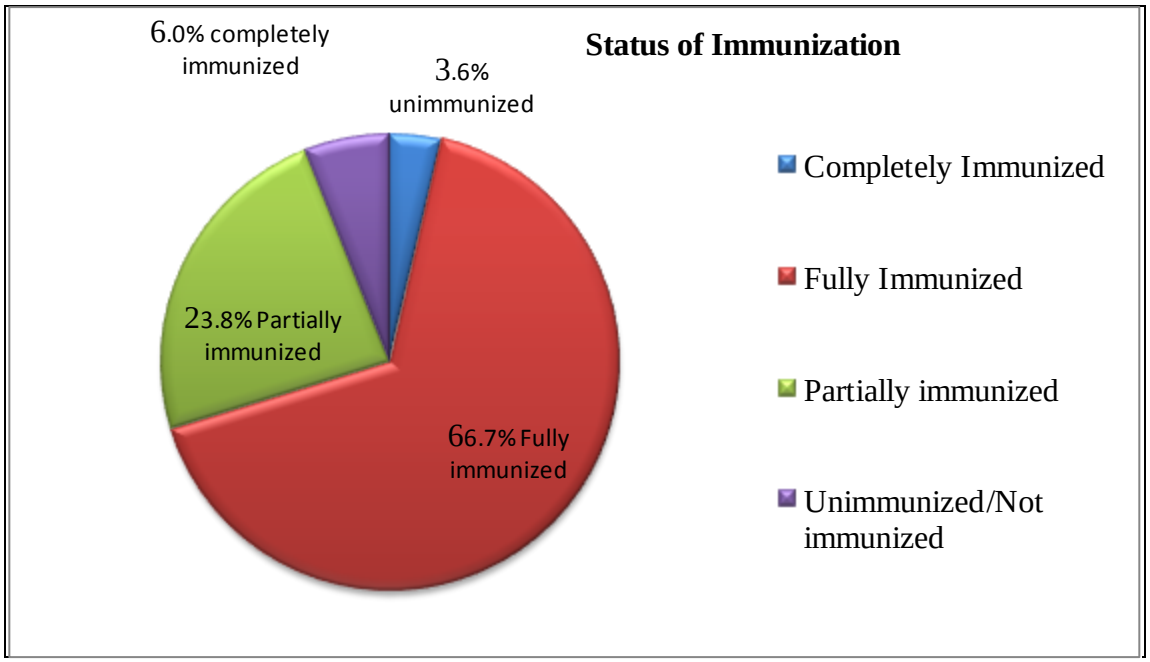
The study was carried out after the ethical clearance from –

(I) Taking approvel from Higher authorities of NRHM-Haryana.

(II) An informed written consent was taken from the respondent in local language, Hindi.

RESULTS

Graph 1: Percentage of Immunization among 12-23 months children in two districts of Haryana (N=84)

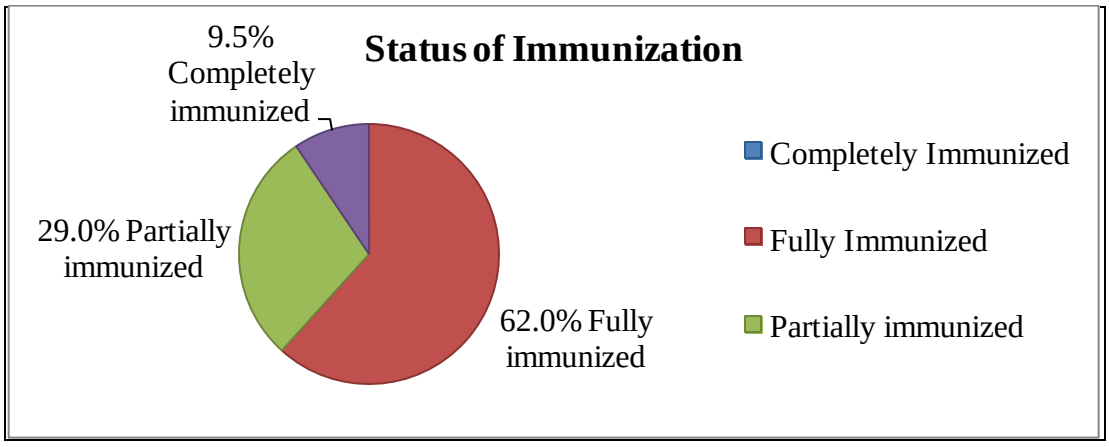


Out of 84 children approx.2/3 were fully immunized.

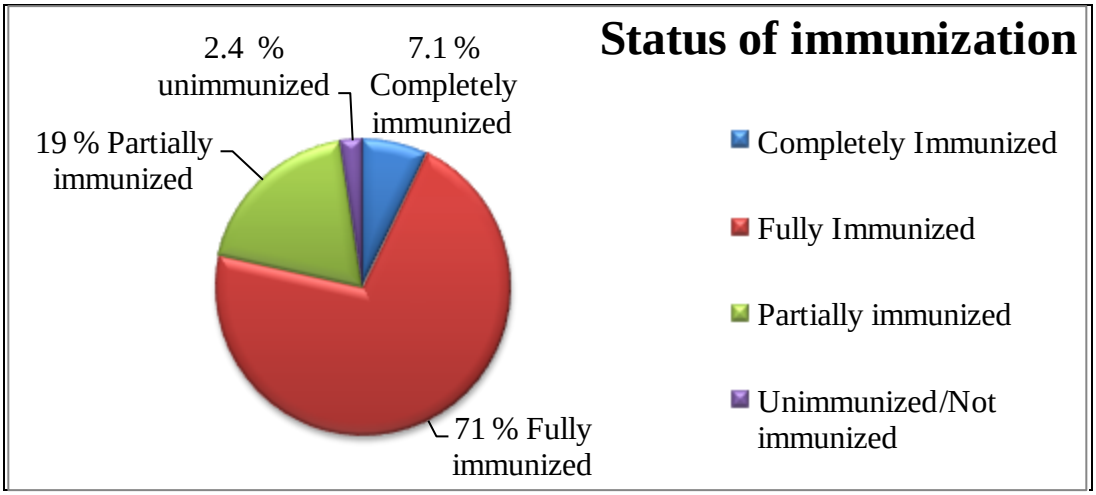
Out of 210 children 6.0 % were unimmunized.

Out of 210 children approx. one fourth were partially immunized.

Graph 2: Percentage of Immunization among 12-23 months children in district Panipat (N=42)

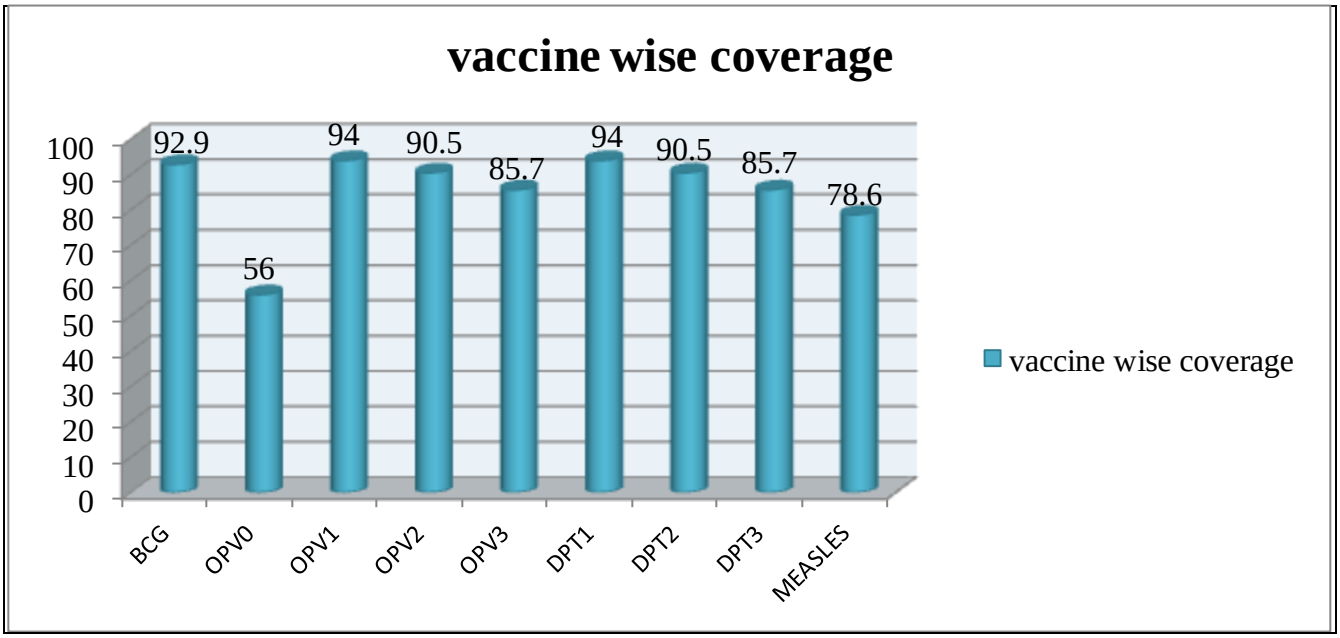


Graph 3: Percentage of Immunization among 12-23 months children in district Yamunanagar (N=42)



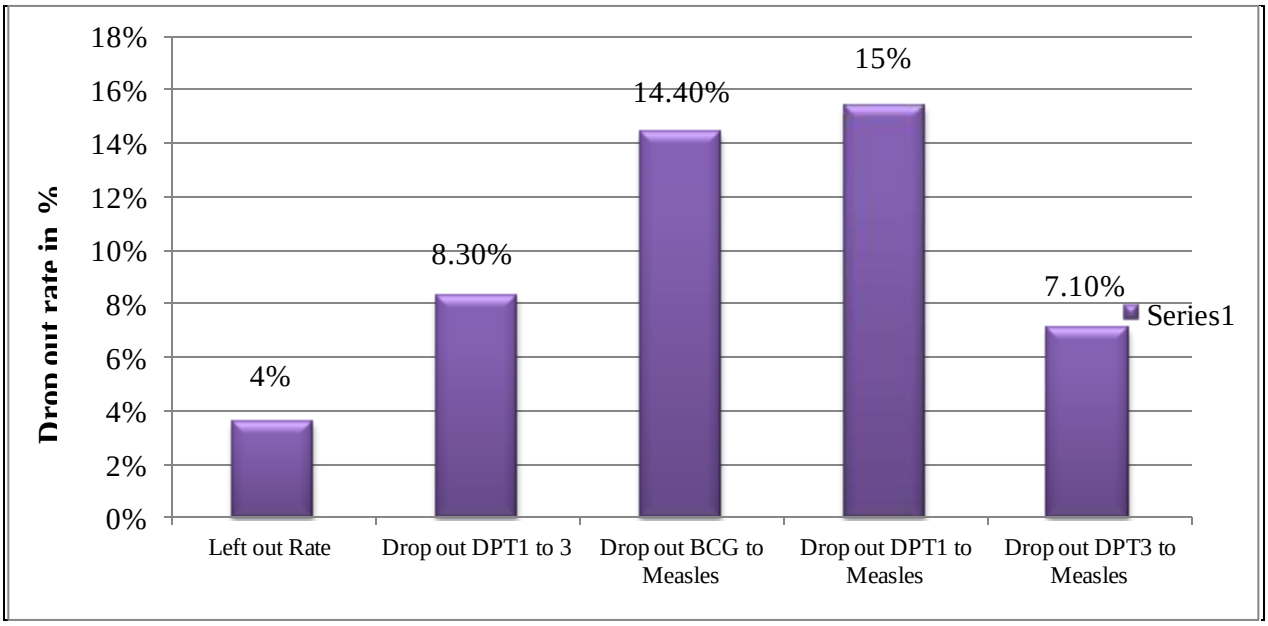
From above, we see that Yamunagar is having better coverage as compared to Panipat district. The follow up of immunization failure is better in Panipat as compred to Yamunagar.

Graph 4: Vaccine wise Coverage of Immunization among 12-23 months children in two districts of Haryana (N=84)



Coverage of BCG is 93.0 percent among 12-23 months children in two districts of Haryana.Coverage of DPT1 is 94.0 percent.Coverage of DPT2 is 90.5 percent .DPT3 coverage is 85.7 percent.For measles the coverage is 78.6percent.Very less coverage of OPV0 shows that follow up or post natal visits just after birth are very less.

Graph 5: Left out and dropout rate among 12-23 months children in two districts of Haryana(N=84)



Out of 84 children, 4 % children are without any immunization.Dropout rate for DPT 1 to DPT3 is 8.3.Drop out rate for DPT 1 to Measles is approx. the same as for BCG to Measles i.e. approx. 15 percent.Dropout rate for DPT1 to Measles is 15.0 percent.DPT 3 to Measles dropout rate is 7.1 %.These dropout shows that people are not using the services provided to them properly.

Table 1: Reasons for partial or no immunization among 12-23 months children in two districts of Haryana (N=28)

Reason for partial/non immunization		Number		Percent
Obstacles	child ill not brought	3	11	11.1
	time of immunisation inconvenient	0		
	mother busy			
	Long waiting time			
	Place of immuniz. too far	1		3.7
	Vaccinator absent	1		3.7
	Vaccine not available	1		3.7
	Family problem, including illness of Mother	4		14.8
	Child ill – brought but not given Immunization	1		3.7
	Others			
Lack of Motivation	No faith in immunization	2	6	3.7
	Postponed until another time	4		14.8
	Rumours			
	Others			
Lack of information	Place and /or time of immunization unknown	4	11	18.5
	fear of side reaction	3		11.1
	unaware of need for immunisation	4		4.7
	unaware of need to return for further doses	0		3.7
Total		28	28	100

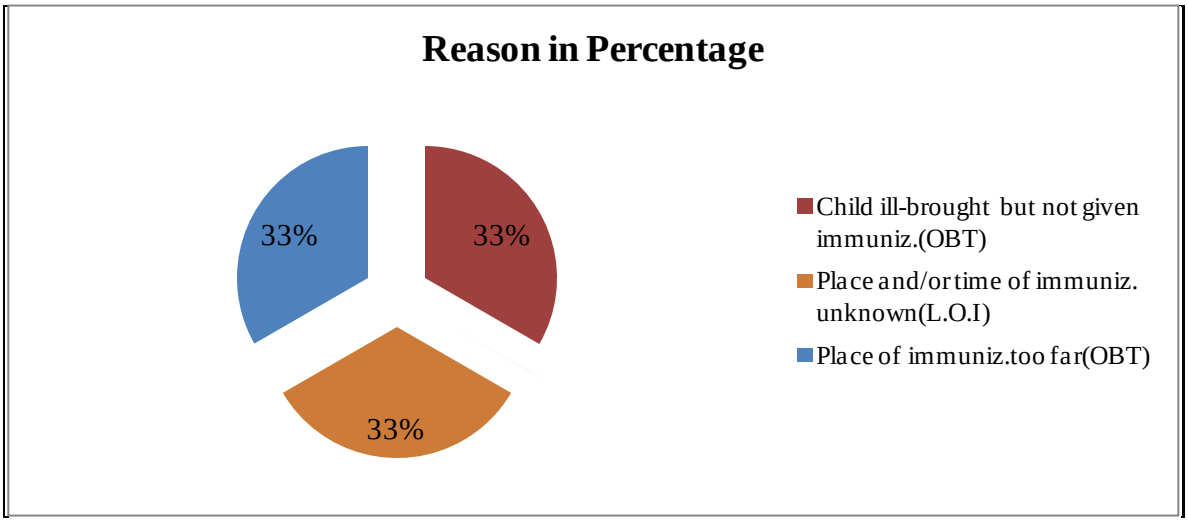
It was evident from the study that lack of appropriate information and obstacles are still the main hurdle for success of primary immunization in rural areas.Also postpone of dose till further,family problems,unaware of need of immunization are the main in the stated reasons.

Table 2: Status according to source of Immunization where child get immunized-

Place where child got immunization	Frequency	Percent
AWC	45	57%
Govt. Hospital	4	5.1%
PHC/CHC	2	2.5%
Sub centre	28	35.4%
Total	79	100.0%

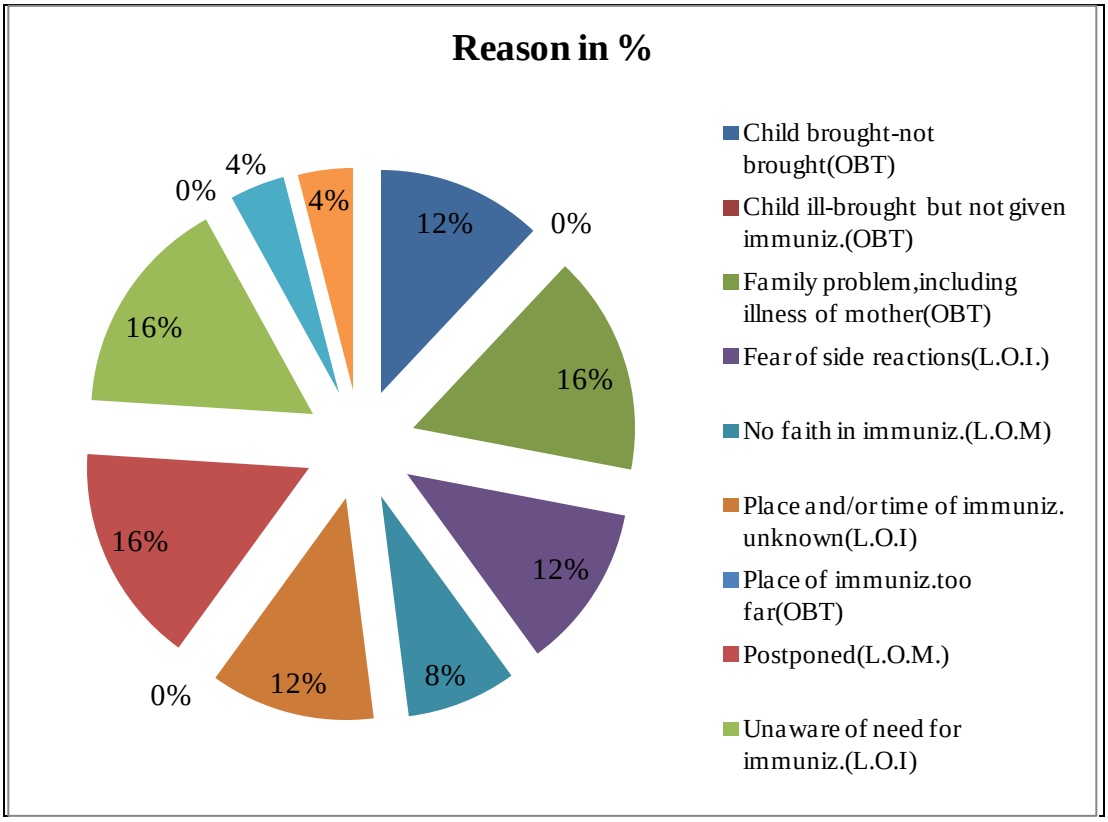
AWC is having the maximum contribution (57 %) followed by sub centre (35.4 %) in getting the children immunized.

Graph 6:- Reason for partial/non immuniz. Religion=Muslim,N=3



In Hindu community, place/time unknown, child ill & place of immunization too far are the only reasons for failure of immunization.

Graph 7:-Reason for partial / non immunization, Religion=Hindu (N=25)



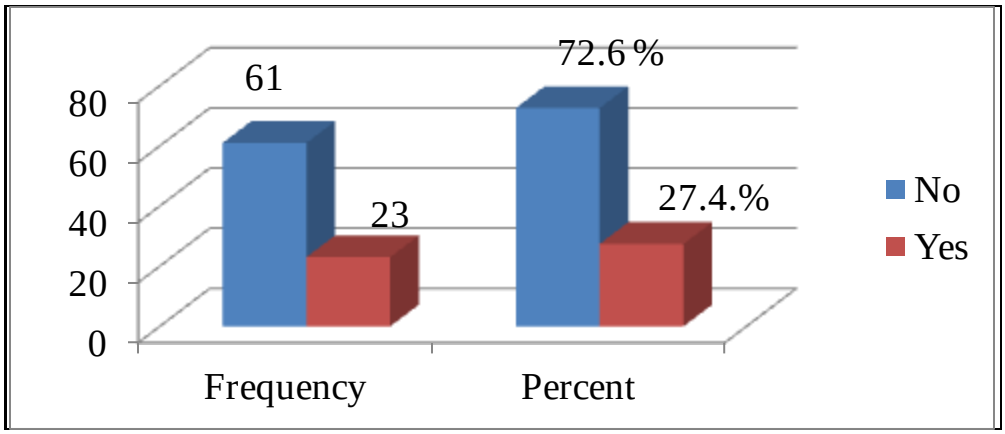
Unaware of need for immunization,family problems & postponed till another time are the main hurdles in Hindu community.

Table 3:-Immunization completed after 1 yr, if not got all vaccines due before 1st B'day (N=28)

if child not fully immunized before 1 yr,if immniz. completed after 1 yr.	Frequency	Percent
No	25	89.3
Yes	3	10.7
Total	28	100

It shows,that the follow up of failure in immunization is not done by health workers,once they get discontinued,they are left out in future also.

Graph 8:- Status of Diarrhea prevalence in last one month :-



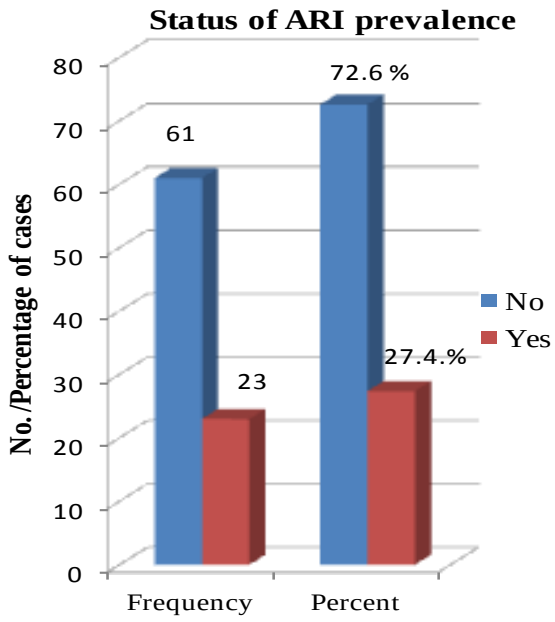
There were a total of approx.27 % children aged 12-23 months found having diarrhoea in last one month in the population of area surveyed.

Table 4:-To Whom the parents consulted for Diarrhoea treatment, If child suffered from Diarrhoea in last 1 month(N=23)

To Whom the parents consulted for Diarrhoea treatment	Frequency	Percent
ANM	1	4.3
AWW	0	
Govt.Doctor	3	13.0
None	1	4.3
Others	0	
Pvt. Doctor	11	47.8
QUACK	3	13.0
RMP	4	17.8
Traditional faith healers	0	
Total	23	100

Private Doctors are the main, who are consulted for diarrhea management by the community.It is due to the easy accessibility of pvt. doctors.

Graph 9:-Status of ARI prevalence in last one month:-



If ARI occured, was antibiotic given or not	Frequency	Percent
No	2	8.7%
Yes	21	91.3%
Total	23	100.0%

Approx. one fourth of children were having ARI during last one month in the study population.

Table 5:-To whom parents consulted for ARI management if the child had ARI during last one month.

To whom parents consulted for ARI treatment	Frequency	Percent
ANM	1	4.3%
AWW	0	0%
Govt.Doctor	2	8.6%
Others	2	8.6%

Pvt. Doctor	8	34.8%
QUACK	5	21.7%
RMP	4	17.4%
None	1	4.3%
Total	23	100.0%

Private doctors are the main who are consulted for ARI in childrens.

Table 6:- Status of PNV during the birth of child:-

Is any post natal visit done by health/ICDS staff	Frequency	Percent
No	71	84
Yes	13	16
Total	84	100

Status of post natal visits is very low (16%), recently Govt. of Haryana is planning to strengthen HBPNC& IMNCI programme for improvement in post natal visits.

If post natal visits done, PNV by whom	Frequency	Percent
ANM	4	31
ASHA	8	61
Not known	1	8
Total	13	100

ASHA is more in touch with the community as compared to ANM, AWW. Still post natal visits are to be strengthend as these are very less performed till date.

Table 7:- Breast feeding practices

Whether Colostrum given	Frequency	Percent
No	13	15.5
Yes	71	84.5
Total	84	100.0%

Breastfeeding Practices contd:-

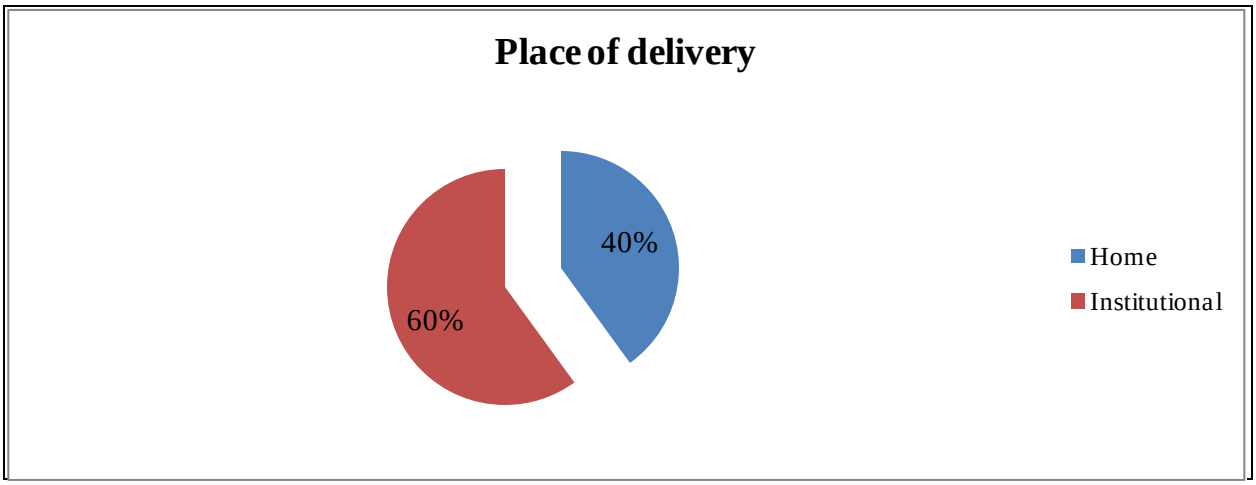
Any pre lactal feed given	Frequency	Percent
No	41	48.8
Yes	43	51.2
Total	84	100

Still a major proportion of community is using the practice of giving pre-lactal feed at time of birth.

EBF done for 6 months	Frequency	Percent
No	43	51.2
Yes	41	48.8
Total	84	100

Still more than 50 % of the community not practicing EBF for 6 months. The practice to give prelactal feed is to be checked. There is a need to sensitize the community for promoting EBF.

Graph 10:-Place of delivery



Percentage of Home delivery found was quite high (40 %) .In these areas,people still believe that Home deliveries are better if there are no complications during ANC. Community is to be sensitize to make them aware about the benefits of institutional deliveries including JSY.

Table 8:- Place of Institutional delivery (N=45)

If institutional ,where delivery took place	Frequency	Percent
Govt. Hsptl	9	18
Others	1	2
PHC/CHC	6	12
Private	25	50
Sub centre	9	18
Total	45	100

People prefer to go to private hospital for the place of delivery inspite of free delivery benefits in Govt. hospitals. People said that better care is available in private hospitals.

Table 9:- The person who conducts the Home delivery (N=35)

In case of home delivery, who conducted the delivery	Frequency	Percent
ANM	2	6
Staff Nurse	1	3
Trained Dai	32	91
Untrained Dai	0	0
Total	35	100

Trained Dai are the main person conducting most of home deliveries.The community still believes that Dai are experienced in conducting home delivery,so they feel that there is no need to go hospitals.

DISCUSSION

The present study was conducted to assess the child care services coverage and factors associated with partial or unimmunization ,health seeking behavior regarding ADD & ARR & status of HBPNC in Haryana. Studies have been conducted in the past to assess the immunization coverage of primary doses in 12-23 months old children; the standard WHO 30-cluster or a rapid assessment during pulse polio immunization was done. In the present study cluster sampling was done to have a precision of 10 and children in the age group of 12-23 months were included to study the coverage of routine immunization.

- It was observed that 67% children were fully immunized in both district taken together,which is comparable with NFHS 3(2005-6) in which it was 65.3% for Haryana,Also in DLHS-3 the full immunization for Panipat & Yamunanagar were 57.0 & 70.0 respectively. Reason for this improvement in coverage could be due to time gap between the two survey
- In the present study partial immunization is 24% which is comparable with NFHS 3 where it was 27%.In DLHS3 Haryana record it was 38.8% which was higher at that time (as compared to our study in 2012).
- Those who did not receive even a single vaccine were 6.0% which is consistent with DLHS 3 where it was 1.9% for Haryana state. It is due to 2 specific districts taken where immunization coverage is not as good.
- It was observed that Dropout rate for DPT1 to DPT3 was 8.3% which is slightly less than the NFHS 3 where as it was 11% and also lower than DLHS 3 where it was 15.6%. As better health services are provided by state in present,so there is improvement in drop out rates.

- The dropout rate for BCG to Measles in the present study was 14.4% while in case of DLHS 3 it was 20.23% for Haryana ,comparable with our findings.
- In our study 27.4 % were suffered from diarrhea While in DLHS-3 it was 17.2% for Haryana & out of those who were suffered 95.6 % seek treatment for diarrhea while in DLHS-3 this figure was 81.7 % .
- ORS was taken by 95.6 % children in our study, while in DLHS-3 this was 31.7 % .All this improvement in diarrhea may be due to improvement in health services & health seeking behavior of community during the time difference of approx. 4 year between these two surveys.
- Regarding place of delivery, institutional deliveries were found 55%, 64.3%, in Panipat & Yamunanagar respectively. In DLHS-3 these were 40 %, & 53.5 % respectively.

CONCLUSION

Present study was planned to know the coverage and factors affecting the child care services.

- It was evident from the study that lack of appropriate information and obstacles are still the main hurdle for success of primary immunization in rural areas.
- Among these reasons Place/time of immunization unknown & postponed until another time were main hurdles to get immunized followed family problem like movement of mother to her maternal home.
- As the DPT 1 is 94 %,shows good coverage of child care services and drop out is more than 10% signifies poor utilization of services.
- The immunization status shows that almost two third children are fully immunized and one third had immunization failure.
- ARI and ADD are still a major problem among children aged 12-23 months.
- Thus, implying that in the community ARI and ADD must be controlled effectively to reduce morbidity and mortality among the community.
- Mothers of children were seeking treatment advice both for ARI & ADD.
- Distance of immunization site from house had not much effect to get child immunized.

LIMITATIONS OF STUDY

Due to insufficient time available (as the project is still proceeding) & lack of man-power resources ,this study was carried out with small sample. All the results which can be found are not there. Although data are available, more results are yet to be found.

2. Focus of study was mainly to immunization aspect, not much results are found of other child care services.

RECOMMENDATIONS

- To plan the strategies which can deal with the drop outs.
- Strengthen IEC activity to aware the community about the need of child health care services.
- To involve the community with best available communication method to change their behavior. This is very much required in community.
- To Plan further studies regarding the poor utilization of services.
- Plan methods to generate the demand of the health services.
- To plan outreach activities to strengthen immunization activities and cope up with left out children.
- Integrated management of childhood illnesses involves family and community health practices.
- Health care seeking behaviors need to be improved to see children healthy.
- Present survey indicates that there is a need to make efforts to impart knowledge on home based management of cases of ARI and ADD.
- IEC activities may be done to educate them on recognition of danger signs of these diseases and to aware them to seek health advice for ARI & ADD.
- Post natal visits should be promoted by implementing authorities.

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ANNEXURES

1. QUESTIONAAIRE:

Cluster No.	Child 1	Child 2	Child 3	Child 4	Child 5	Child 6	Child 7
Cluster Population-							
Youngest Child's Name							
Father name							
Mother name							
Date of Birth							
Age (months)							
Sex (M / F)							
Total living siblings of child -- M/ F (T)							
Birth order of child							
Area of Residence Rural/Urban/Urban slum							
Caste							
Religion							
Place where child got last immunization							
Distance of house from immuniz. Site <0.5 Km / 0.5-1.0 Km / >1.0 Km							
Does mother knows when the immunisation sessions held in cluster population Y/N							
Immunization card issued by health facility Yes/NO							
Immuniz. Card available Yes/No							
if yes,card updated upto last immuniz. Yes/No							
Primary vaccination Key:Date/+/0 Date=copy date of immuniz. from card ,if available, + (plus) mother reports immuniz. was given, 0 (zero) immuniz. was not given							
BCG (date/+/0)							
if scar present Yes/No							
OPV0 (date/+/0)							
OPV1 (date/+/0)							
OPV2 (date/+/0)							
OPV3 (date/+/0)							
DPT1 (date/+/0)							
DPT2 (date/+/0)							
DPT3 (date/+/0)							
MEASLES (date/+/0)							
Vitamin A (date/+/0)							

Any additional vaccine given except these Yes/No								
if yes,name these & how much doses								
if child fully Immunized before his/her 1st b'day Yes/No								
if no,Completed immnisation after 1 yr. Yes/No								
If yes (completed after 1 yr.),age in months when primary immuniz. completed								
Age of mother at time of delivery in years								
Education	Mother							
	Father							
Occupation	Mother							
	Father							
Family income (monthly in Rs.)								
Place of delivery Home/ Institutional								
If institutional ,where delivery took place								
Who helped in delivery								
No. of TT doses given to mother during pregnancy								
Status of breast feeding -								
a)Whether Colostrum given Yes/No								
b)Any pre lactal feed given Yes/No								
c)Breast feeding initiated within 1 hr/24 hr/after 24 hr. Yes/No								
d)EBF done for 6 months Yes/No								
Is any post natal visit done by health/ICDS staff- Yes/No								
If yes,who has done these visits- 1)ASHA 2)ANM 3)AWW 4)Dai 5)others(specify)								
when was post natl visits done-date/days after delivery	1st visit							
	2nd visit							
	3rd visit							
	4th visit							
	5th visit							
	6th visit							
if PNV done,whether are recorded in immuniz./MCH card Yes/No								
Where do they take child in case of illness								
Did child suffered from Diarrhoea in last 1	Yes/No							

month								
If yes,whether ORS was given	Yes/No							
Who was consulted for treatment								
Did child had an episode of ARI in last 1 month	Yes/No							
If yes,was antibiotic /Colramaxzole given	Yes/No							
Whom they consulted for treatment in case of ARI								

2. QUESTIONNIRE CODE SHEET –

1. Religion - 1. Hindu 2. Muslim 3.Sikh 4.Christian 5.Others

2. Place of immunization —1.Sub center 2. PHC/CHC 3.Govt.Hospital 4. Private 5.Outreach 6.NGO 7.AWC 8.None 9.others

3. Immunization sessions held – 1) weekly 2) fortnight 3) monthly 4) other

4. Status of Immunization- 1.Full immunization 2.Partial immunization 3.No immunization

5. If institutional, where delivery took place - 1.Sub center 2. PHC/CHC 3.Govt.Hospital 4. Pvt. Hospital 5.Others

6. Who helped in delivery - 1.Trained Dai 2.Untrained Dai 3. ANM 4.Staff nurse- 5. Doctor 6. Other

7. Post natal visits done by- 1.ASHA 2.ANM 3.AWW 4.Dai 5.Others (specify)

8. In case of illness/Diarrhea/ARI who was consulted—1. ANM 2.AWW 3.ASHA 4.QUACK 5.RMP 6.PHC/Govt.health facility 7.Pvt. qualified medical practitioner 8.Traditional faith healer 9.others

9.Caste - **1.**SC/ST 2. BC 3.OBC 4. GENERAL 5.OTHERS

Cluster Form
Reasons for Immunization Failure

(1) Cluster number: _____ (4) Range of birthdates: From: _____

(2) Area: _____ Until: _____

(3) Date: _____

NOTE: ASK ONLY ONE QUESTION: "Why was the child not fully immunized?" Mark (X) the single most important reason according to your judgment.

Child number in cluster			1	2	3	4	5	6	7	8	TOTAL
(5)	Immunization Status	Not immunized									
		Partially immunized									
		Fully immunized									
(6)	Lack of information	a. Unaware of need for immunization									
		b. Unaware of need to return for 2nd or 3rd dose.									
		c. Place and/or time of immunization unknown									
		d. Fear of side reactions									
		e. Wrong ideas about contraindications									
		f. Other									
	Lack of motivation	g. Postponed until another time									
		h. No faith in immunization									
		i. Rumors									
		j. Other									
	Obstacles	k. Place of immunization too far									
		l. Time of immunization inconvenient									
		m. Vaccinator absent									
		n. Vaccine not available									
		o. Mother too busy									
		p. Family problem, including illness of mother									
		q. Child ill - not brought									
		r. Child ill - brought but not given immunization									
		s. Long waiting time									
		t. Other									

4.Consent form for respondent

अनुज्ञा पत्र

प्रार्थी का अनुमोदन

यह बताया जाता है कि मुझे परिणामों की उलझनों के बारे में बाताया गया है, अर्थात सकारात्मक, वैकल्पिक रूप से सकारात्मक, नकारात्मक तथा प्रोजेकट से सम्बन्धित सभी विवरण उसका संचारण उसकी सीमायें, सभी मुझे ऐसी भाषा में बताई गई है, जिसे मै सही तरह समझ सकू।

मै किसी भी प्रकार की पूछताछ के लिए अनुमति प्रदान करता/करती हूं।

हॉ नही

मुझे ज्ञात है कि जो भी सूचना मैं प्रदान कर रहा/रही हूं वो गोपनिय रखी जाएगी और किसी भी सूचना का उपयोग कही भी प्रार्थी की व्यक्तिगत पहचान के लिए नहीं किया जाएगा।

मुझे इस प्रोजेकट के परिणामों का उपयोग किसी भी वैज्ञानिक प्रज्ञापन में होने पर आपत्ति नही है।

प्रार्थी का नाम ----------

हस्ताक्षर ----------

साक्षात्कार कर्ता ----------

5. Modified Kuppuswami's Scale of social classification

Component		Weighted Score
Education		
Professional degree		7
Graduate		6
Intermediate		5
High school		4
Middle		3
Primary educated/literate	Is the ability to identify, understand, interpret, create, communicate ,compute and use printed and written materials associated with varying contexts.	2
Illiterate	Being unable to read & write or to use any written language to interpret	1
Occupation		
Professional		10
Semi professional		6
Clerical/shop owner/farm		5
Skilled worker	Any worker who has some special skill, knowledge or ability in his work. A skilled worker may have attended a college, university or technical school	4
Semiskilled worker		3
Unskilled worker		2

Unemployed	Occurs when a person is available to work and currently seeking work, but the person is without work.	1
Monthly Income		
Above Rs.20000		12
10000-19999		10
7500-9999		6
5000-7499		4
3000-4999		3
1001-2999		2
Below Rs.1000		1

SCORE TABLE OF KUPPUSWAMI SCALE :-

<5	LOWER
5-10	UPPER LOWER
11-15	LOWER MIDDLE
16-25	UPPER MIDDLE
26-29	UPPER