Internship Training

at

National Health Mission, Haryana

Maternal Knowledge, Attitude & Practices regarding Immunization of Children of age group 0-5 years in Haryana

by

Dr. Archana Dhaka
Enroll No. – PG/13/006

Under the guidance of

Dr Preetha GS

Post Graduate Diploma in Hospital and Health Management
2013-15

International Institute of Health Management Research
New Delhi

Internship Training

at

National Health Mission, Haryana

Maternal Knowledge, Attitude & Practices regarding Immunization of Children of age group 0-5 years in Haryana

by

Dr. Archana Dhaka
Enroll No. PG/13/006

Under the guidance of

Dr. Preetha GS

Post Graduate Diploma in Hospital and Health Management

2013-15

International Institute of Health Management Research
New Delhi

(Completion of Dissertation from NHM, Haryana)

The certificate is awarded to

Dr. Archana Dhaka

In recognition of having successfully completed her

Internship in the department of

Child Health

and has successfully completed her Project on

Maternal knowledge , attitude & practices regarding immunization of children of age group 0-5 years in Haryana

Date

National Health Mission, Haryana

She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning

We wish him/her all the best for future endeavors

Training & Development

Zonal Head-Human Resources

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr. Archana Dhaka**, student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at **National Health Mission, Haryana** from 7th April 2015 to 30th June 2015.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements. I wish her all success in all her future endeavors.

Dr. A.K. Agarwal

Dean, Academics and Student Affairs

IIHMR, New Delhi

Dr. Preetha GS

Mentor

IIHMR, New Delhi

iii

Certificate of Approval

The following dissertation titled **"Maternal knowledge , attitude & practices regarding immunization of children of age group 0-5 years in Haryana"** at **"National Health Mission, Haryana"** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily 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
S. Vinay Adhl	
VINAY TRIPATHI	
Purnima Gs	
Dr. Dhananjay.	

iv

Certificate from Dissertation Advisory Committee

This is to certify that **Dr. Archana Dhaka,** a graduate student of the **Post-Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. He/ She is submitting this dissertation titled "**Maternal knowledge , attitude & practices regarding immunization of children of age group 0-5 years in Haryana**" at "National Health Mission, 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.

Institute Mentor Name,

Dr. Preetha GS

Associate Professor

IIHMR, Delhi

Organization Mentor Name

Dr. Suresh Dalpath

Deputy Director (Child Health)

NHM, Haryana

v

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH,

NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "**Maternal knowledge , attitude & practices regarding immunization of children of age group 0-5 years in Haryana"** and submitted by Dr. Archana Dhaka

Enrollment No PG/13/006

under the supervision of Dr. Preetha GS for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 7th April 2015 to 30th June 2015, embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Archana

Signature

FEEDBACK FORM

Name of the Student: Dr. ARCHANA DHAKA.
Dissertation Organisation: NHM, Haryana.
Area of Dissertation: Immunization (Child Health)
Attendance: Full (April 7 - May 27)
Objectives achieved:
Very well.

Deliverables:

Strengths: A very hardworking person with good comprehension & understanding of the subject. Able to compile & present the work done effectively & efficiently.

Suggestions for Improvement:

Signature of the Organisation Mentor (Dissertation)

Date: 27/5/15
Place: Panchkula.

ABSTRACT

This cross sectional analytical study has been carried out in two districts of Haryana to assess mother's knowledge, attitudes, and practices in a community setting so that identified gaps should be fulfilled in order to achieve the immunization targets. The population under study includes mothers with children in the age group 0-5 years. The study area includes facilities in Districts, Jind ,Karnal and Panchkula with a sample size of 100 and the study is conducted from 1st April 2015 to 21st May 2015. A semi-structured questionnaire consisting of 25 questions was framed and asked in the form of personal interview sessions. Subjects were identified randomly in the facilities and data was collected. Their responses were entered in SPSS & thereby the results were assessed.

All the mothers in the sample were found to be literate. 43% of them had intermediate level of education. All of them had heard about immunization and most knew about Polio, TB, Whooping cough, Diptheria, Pertussis & tetanus vaccines. Overall knowledge was not so satisfactory with positive attitude & fair practices. Health workers were the most common source of information. AEFI was found to be most common reason for non-immunization. It was ultimately found that educational status was directly related to the level of knowledge of mothers and also influenced attitude and practices. Community participation and sustained public awareness are needed to erode fears of AEFI. Health education campaign should target mothers to improve the child health status and to achieve the targets of immunization.

ACKNOWLEDGEMENT

Every project big or small is successful largely due to the effort of a number of wonderful people who have always given their valuable advice or lent a helping hand. I sincerely appreciate the inspiration; support and guidance of all those people who have been instrumental in making this project a success.

I, Archana Dhaka, student of International Institute of Health Management Research (IIHMR),Delhi, am extremely grateful to National Health Mission, Haryana for the confidence bestowed in me and entrusting my project entitled **"Maternal knowledge , attitude & practices regarding immunization of children of age group 0-5 years in Haryana"** with special reference to Child Health Department.

At this juncture I feel deeply honored in expressing my sincere thanks to **Mr. Vikas Yadav(MD, NHM) , Dr Suresh Dalpat (DDCH, NHM) and Dr. Sube Singh (MO, NHM)** for making the resources available at right time and providing valuable insights leading to the successful completion of my project.

I am thankful to Child Health Department members for their unceasing support. I feel indebted to the respondents and the administrative officials of the facilities for their compliance and cooperation without which this study would not have been possible.

I express my gratitude to **Dr. A. K. Agarwal (DEAN, Academic &Students Affair)** for arranging the summer training in good schedule. I also extend my gratitude to my Project Guide **Prof. (Dr.) Preetha GS,** who assisted me in compiling the project.

Last but not the least I place a deep sense of gratitude to my family members and my friends who have been constant source of inspiration during the preparation of this project work.

Dr. Archana Dhaka

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF SYMBOLS & ABBREVIATIONS

AEFI	Adverse Events Following Immunization
ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infections
ASHA	Accredited Social Health Activist
BCG	Bacillus of Calmette Guerin
DPT	Diphtheria Pertussis Tetanus
EPI	Expanded Program of Immunization
Hep.B	Hepatitis B
HQ	Headquarters
IMR	Infant Mortality Rate
INAP	India Newborn Action Plan
KMC	Kangaroo Mother Care
MoHFW	Ministry of Health and Family Welfare
MMR	Maternal Mortality Ratio

NHM	National Health Mission
NRC	Nutritional Rehabilitation Centres
NRHM	National Rural Health Mission
NTAGI	National Technical Advisory Group on Immunization
NUHM	National Urban Health Mission
OPV	Oral Polio Vaccine
SIA	Supplementary Immunization Activities
SNID	Sub National Immunization Day
PIP	Program Implementation Plan
RCH	Reproductive and Child Health
RI	Routine immunization
TFR	Total Fertility Rate
TT	Tetanus Toxoid
UNICEF	United Nations Children's Fund

INTRODUCTION

The Union Cabinet vide its decision dated 1st May 2013 has approved the launch of National Urban Health Mission (NUHM) as a Sub-mission of an over-arching National Health Mission (NHM), with National Rural Health Mission (NRHM) being the other Sub-mission of National Health Mission.

NHM has six financing components:

(i) NRHM-RCH Flexipool,

(ii) NUHM Flexipool,

(iii) Flexible pool for Communicable disease,

(iv) Flexible pool for Non communicable disease including Injury and Trauma,

(v) Infrastructure Maintenance and

(vi) Family Welfare Central Sector component.

Within the broad national parameters and priorities, states would have the flexibility to plan and implement state specific action plans. The state PIP would spell out the key strategies, activities undertaken, budgetary requirements and key health outputs and outcomes.

GOALS:

Outcomes for NHM in the 12th Plan are synonymous with those of the 12th Plan, and are part of the overall vision. Specific goals for the states will be based on existing levels, capacity and context. State specific innovations would be encouraged. Process and outcome indicators will be developed to reflect equity, quality, efficiency and responsiveness. Targets for communicable and non-communicable disease will be set at state level based on local epidemiological patterns and taking into account the financing available for each of these conditions.

1. Reduce MMR to 1/1000 live births

2. Reduce IMR to 25/1000 live births

3. Reduce TFR to 2.1

4. Prevention and reduction of anaemia in women aged 15–49 years

5. Prevent and reduce mortality & morbidity from communicable, non-communicable; injuries and emerging diseases

6. Reduce household out-of-pocket expenditure on total health care expenditure

7. Reduce annual incidence and mortality from Tuberculosis by half

8. Reduce prevalence of Leprosy to <1/10000 population and incidence to zero in all districts

9. Annual Malaria Incidence to be <1/1000

10. Less than 1 per cent microfilaria prevalence in all districts

11. Kala-azar Elimination by 2015, <1 case per 10000 population in all block

ORGANIZATIONAL PROFILE

NATIONAL HEALTH MISSION, HARYANA

Fig. 2.1.1

- The National Rural Health mission (NRHM) was launched by the Honorable Prime Minister on 12th April 2005, to provide accessible, affordable and quality health care to the rural population, especially the vulnerable groups.
- The Union Cabinet vide its decision dated 1st May 2013 has approved the launch of National Urban Health Mission (NUHM) as a Sub-mission of an over-arching National Health Mission (NHM), with National Rural Health Mission (NRHM) being the other Sub-mission of National Health Mission.
- Within the broad national parameters and priorities, states would have the flexibility to plan and implement state specific action plans.

- The State PIPs would be an aggregate of the district/city health action plans, and include activities to be carried out at the state level. All existing vertical programmes, shall be horizontally integrated at state, district and block levels.

Vision of the NHM

"Attainment of Universal Access to Equitable, Affordable and Quality health care services, accountable and responsive to people's needs, with effective inter-sectoral convergent action to address the wider social determinants of health".

Core Values

- Safeguard the health of the poor, vulnerable and disadvantaged, and move towards a right based approach to health through entitlements and service guarantees
- Strengthen public health systems as a basis for universal access and social protection against the rising costs of health care.
- Build environment of trust between people and providers of health services.
- Empower community to become active participants in the process of attainment of highest possible levels of health.
- Institutionalize transparency and accountability in all processes and mechanisms.
- Improve efficiency to optimize use of available resources.

DEPARTMENTS

- Maternal Health
- Child Health
- Family planning
- ASHA
- Referal transport
- Behavior change & communication
- Rastriya Bal Swasthya Karyakram

SERVICES PROVIDED & DEPARTMENTS WORKED AT

The child health programme under the National Health Mission (NHM) comprehensively integrates interventions that improve child survival and addresses factors contributing to infant and under-five mortality. It is now well recognised that child survival cannot be addressed in isolation as it is intricately linked to the health of the mother, which is further determined by her health and development as an adolescent. Therefore, the concept of Continuum of Care, that emphasises on care during critical life stages in order to improve child survival, is being followed under the national programme. Another dimension of this approach is to ensure that critical services are made available at home, through community outreach and through health facilities at various levels (primary, first referral units, tertiary

health care facilities). The newborn and child health are now the two key pillars of the Reproductive, Maternal, Newborn, Child and Adolescent health (RMNCH+A) strategic approach, 2013. [1]

NEWBORN AND CHILD HEALTH INTERVENTIONS:

1. FACILITY BASED NEWBORN CARE

- SNCU Online Reporting Network
- Janani Shishu Suraksha Karyakram (JSSK)
- Ensuring Injection vitamin K in all the births in the facility
- Up scaling of Kangaroo Mother Care (KMC) in health facility
- Empowering frontline health service providers
- National Training Package for Facility Based Newborn Care
- Establishing Network of Resource (Collaborative) Centres
- India Newborn Action Plan (INAP)

2. HOME BASED NEWBORN CARE SCHEME

3. CHILD DEATH REVIEW

4. INFANT AND YOUNG CHILD FEEDING

5. NUTRITIONAL REHABILITATION CENTRES (NRC)

6. SUPPLEMENTATION WITH MICRONUTRIENTS

- Iron Folic Acid Supplementation and deworming to children (6 months to 59 months) and children (6-10 years):

- Vitamin A Supplementation in under-five children

7. REDUCTION IN MORBIDITY AND MORTALITY DUE TO ACUTE RESPIRATORY INFECTIONS

(ARI) AND DIARRHOEAL DISEASES

- Childhood Diarrhoeal Diseases
- Acute respiratory infections

8. RASHRTIYA BAL SWASTHYA KARYAKRAM (RBSK)

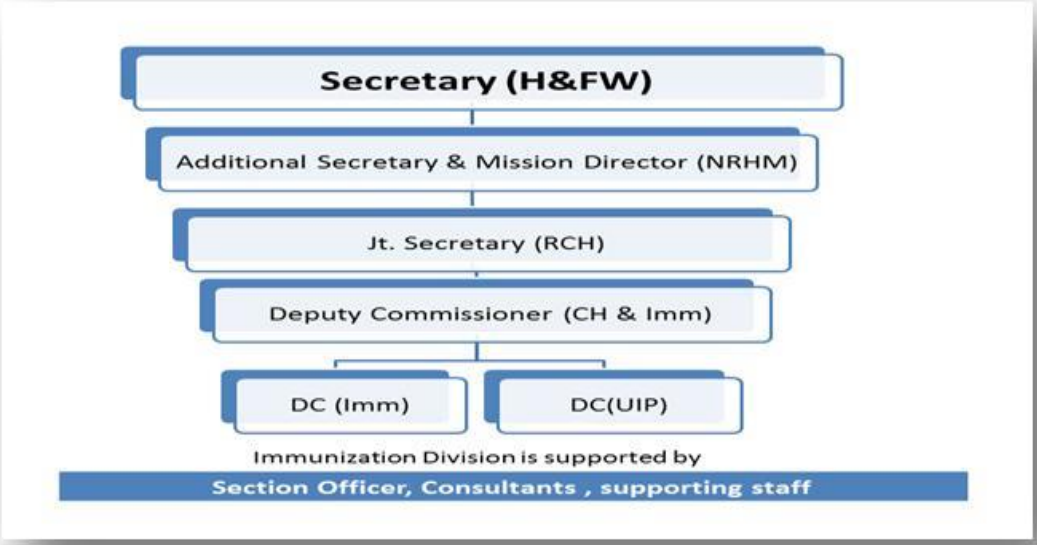


Fig. 2.1.2

Organogram of immunization division

- **OBSERVATIONS/ LEARNING**

1. Learning regarding basic functioning of various departments under Child Health was imparted.
2. Held the responsibility of state monitor during monitoring of Mission Indradhanush Round 1 & 2; and during SNID

- **ANY PROJECTS UNDERTAKEN OTHER THAN DISSERTATION**

Monitoring of Mission Indradhanush

Round1 (Mewat)

1. Visits were made to various blocks of Mewat including Nuh, Chandeni, Nagina, Taoru, Ghaghas, Bhadhas, Ujina & Punhana.
2. Session site monitoring as well as house to house monitoring was done in the prescribed formats.
3. Daily feedback reports were sent to the State HQ and daily participation in evening briefing was done.
4. Issues found out during monitoring were discussed & suggestions for improvement were given during meetings.

Round2 (Jind)

1. Visits were made to all blocks of Jind which were Uchana, Ujhana, Kandela, Kharakramji, Safeedon, Jind Urban, Julana & Kalwa.
2. Session site monitoring as well as house to house monitoring was done in the prescribed formats.
3. Daily feedback reports were sent to the State HQ and daily participation in evening briefing was done.
4. Issues were discussed with the Chief Medical Officer and improvements were made in the same.

SNID

1. Various blocks of Karnal including Jalmana, Assandh, & Nissing were visited for monitoring of SNID.
2. Data was compiled in the prescribed formats.
3. Evening briefings were attended and feedback was submitted to the Chief Medical Officer

MATERNAL KNOWLEDGE, ATTITUDE & PRACTICES REGARDING IMMUNIZATION OF CHILDREN OF AGE GROUP 0-5 YEARS IN HARYANA

INTRODUCTION

The Immunization Programme was started in India in 1978 with the objective of reducing the morbidity and mortality due to vaccine preventable diseases. Universal Immunization Programme against six preventable diseases, namely, diphtheria, pertussis, childhood tuberculosis, poliomyelitis, measles and neonatal tetanus was introduced in the country in a phased manner in 1985, which covered the whole of India by 1990.[(2)]

Immunisation is one of the most important weapons for protecting individuals and the community from serious diseases. The Department's immunisation team supports the public and health professionals by offering clear, evidence-based information about different diseases, the possible side effects of immunisation and available vaccines.[(3)]

In 1974 the world health organisation (WHO) launched its expanded programme on immunisation (EPI) against six most common preventable childhood diseases viz. Diphtheria, pertusis (whooping cough), tetanus, polio, tuberculosis and measles, from the beginning of the programme UNICEF has been providing significant support to EPI. UNICEF worked with WHO to achieved universal childhood immunisation of the six EPI vaccines. As a result of global immunisation coverage increased from less than 20 % to nearly 80 % by 1990. Nearly 30 million children are still not fully immunised every year.[4]

Immunization, or immunisation, is the process by which an individual's immune system becomes fortified against an agent (known as the immunogen).When an immune system is exposed to molecules that are foreign to the body (non-self), it will orchestrate an immune response, but it can also develop the ability to quickly respond to a subsequent encounter.[5]

Immunization can be done through various techniques, most commonly vaccination. Vaccines against microorganisms that cause diseases can prepare the body's immune system, thus helping to fight or prevent an infection. The fact that mutations can cause cancer cells to produce proteins or other molecules that are unknown to the body forms the theoretical basis for therapeutic cancer vaccines. [6]

Immunization can be achieved in an active or passive fashion: vaccination is an active form of immunization. Active immunization entails the introduction of a

foreign molecule into the body, which causes the body itself to generate immunity against the target. Passive immunization is where pre-synthesized elements of the immune system are transferred to a person so that the body does not need to produce these elements itself.[7]

Because most children depend on their parents to be in charge of their health care, it is likely that parental health literacy may also influence child health outcomes (Pati et al., 2010). When compared with adult health, the role of health literacy in child health care has been studied less comprehensively [8]. Nonetheless, the divergence between complex health information and low parental health literacy skills may be a significant mediator of child health disparities and immunizations.

It was thought that if mothers are educated properly and if their knowledge is assessed regarding immunization schedule, then the outcome will be better for the future generation, and the immunization schedule will be more effective.

Misconceptions and myths regarding the vaccine, concern about its ill effects and lack of awareness about immunization are the major obstacles. This study aims to identify these misconceptions to better inform future implementation of this programme. This study was thus conducted to assess the awareness of the target population about immunization, and to assess their attitude and practice towards it.

REVIEW OF LITERATURE

The Development of Immunization

The use of immunization to combat the spread of fatal infectious diseases became widely prevalent over the course of the 20th century. "Immunization against infectious disease has probably saved more lives than any other public health intervention, apart from the provision of clean water" (Bedford & Elliman, 2000, p. 240). While the role played by immunizations in reducing childhood mortality over the course of the 20th century is widely acknowledged, the practice of immunization is much older, and precedes the 20th century. A rudimentary form of immunization was practiced by the Chinese as early as the I0th century BC.[9] The first use of immunization, as we know it today, occurred in 1796, when the British physician Edward Jenner discovered the first safe and effective vaccine against smallpox.

How Vaccines Work

Vaccines are usually tiny organisms that are replicas of disease causing organisms. Once injected into the human body, vaccines activate the body's immune system by stimulating specialized cells responsible for attacking antigens or foreign particles in the body.[10]

Administration of Vaccines

Vaccines can be injected into the body, or can be orally ingested. The immunity conferred by some vaccines is short-term, and "boosters" may be required to prolong immunity.

Immunization Division at MoHFW

Immunization division is a part of the RCH program under National Rural Health Mission (NRHM) and is placed in the Ministry Of Health and Family Welfare, Nirman Bhawan New Delhi. This division provides all the technical assistance required to undertake the activities under UIP. The division reviews the state Program implementation plans and facilitates in its approval process as per norms and guidelines The key roles of this division include activities related to Routine Immunization, Campaigns (SIAs) such as Polio, Measles, and Japanese Encephalitis, Monitoring Adverse Events Following Immunization (AEFI), Vaccine and Cold Chain Logistics, Strategic communication related to immunization program and trainings related to Immunization Program. It facilitates the National Technical Advisory Group on Immunization (NTAGI) to review and recommend its views on various technical and programmatic issues related to immunization such as new vaccine introduction etc. The division is engaged in reviewing and sharing the learnings of the program with state and district program officers. The division also works closely with all development partners and other stake holders.[11]

UNIVERSAL IMMUNIZATION PROGRAMME (UIP)

<u>Evolution of the programme</u>:

1978: Expanded Programme of immunization (EPI).

- Limited reach - mostly urban

1985: Universal Immunization Programme (UIP).

- For reduction of mortality and morbidity due to 6 VPD's.
- Indigenous vaccine production capacity enhanced
- Cold chain established
- Phased implementation - all districts covered by 1989-90.
- Monitoring and evaluation system implemented

1986: Technology Mission On Immunization

- Monitoring under PMO's 20 point programme
- Coverage in infants (0 – 12 months) monitored

1992: Child Survival and Safe Motherhood (CSSM)

- Included both UIP and Safe motherhood program

1997: Reproductive Child Health (RCH 1)

2005: National Rural Health Mission (NRHM)

Vaccines under UIP

BCG (Bacillus Calmette Guerin) , DPT (Diphtheria, Pertussis and Tetanus Toxoid) , OPV (Oral Polio Vaccine) , Measles , Hepatitis B , TT (Tetanus Toxoid) , JE vaccination (in selected high disease burden districts) ,Hib containing Pentavalent vaccine (DPT+HepB+Hib) (In selected States) .

Diseases Protected by Vaccination under UIP

Diphtheria , Pertussis. , Tetanus , Polio , Tuberculosis , Measles ,Hepatitis B , Japanese Encephalitis (commonly known as brain fever), Meningitis and Pneumonia caused by Haemophilus Influenzae type b

Implementation of Routine Immunization

- RI targets to vaccinate ***26 million new born*** each year with all primary doses and ***~100 million*** children of 1-5 year age with booster doses of UIP vaccines. In addition, 30 million pregnant mothers are targeted for TT vaccination each year.
- To vaccinate this cohort of ***156 million beneficiaries***, ***~9 million*** immunization sessions are conducted, majority of these are at village level.
- As per Coverage Evaluation Survey (2009), ***89.8%*** of vaccination in India is provided through ***Public sector*** (53% from outreach session held at Anganwadi centre (25.6%), sub centre (18.9%) etc.) while private sector

contributed to only 8.7%.

- ASHA and AWW support ANM by mobilizing eligible children to session site thus try to ensure that no child is missed. ASHA is also provided an incentive of Rs. 150/session for this activity
- To ensure potent and safe vaccines are delivered to children, a network of ***~27,000 cold chain points*** have been created across the country where vaccines are stored at recommended temperatures.

Components

1. Strategy and policy

   National Health Policy (2002)

   National Vaccine Policy (2011)
2. Cold Chain System, Vaccines and Logistics
3. Injection safety and waste disposal
4. AEFI Surveillance System in India
5. Strategic communication
6. Monitoring and evaluation

Coverage of immunization in Haryana

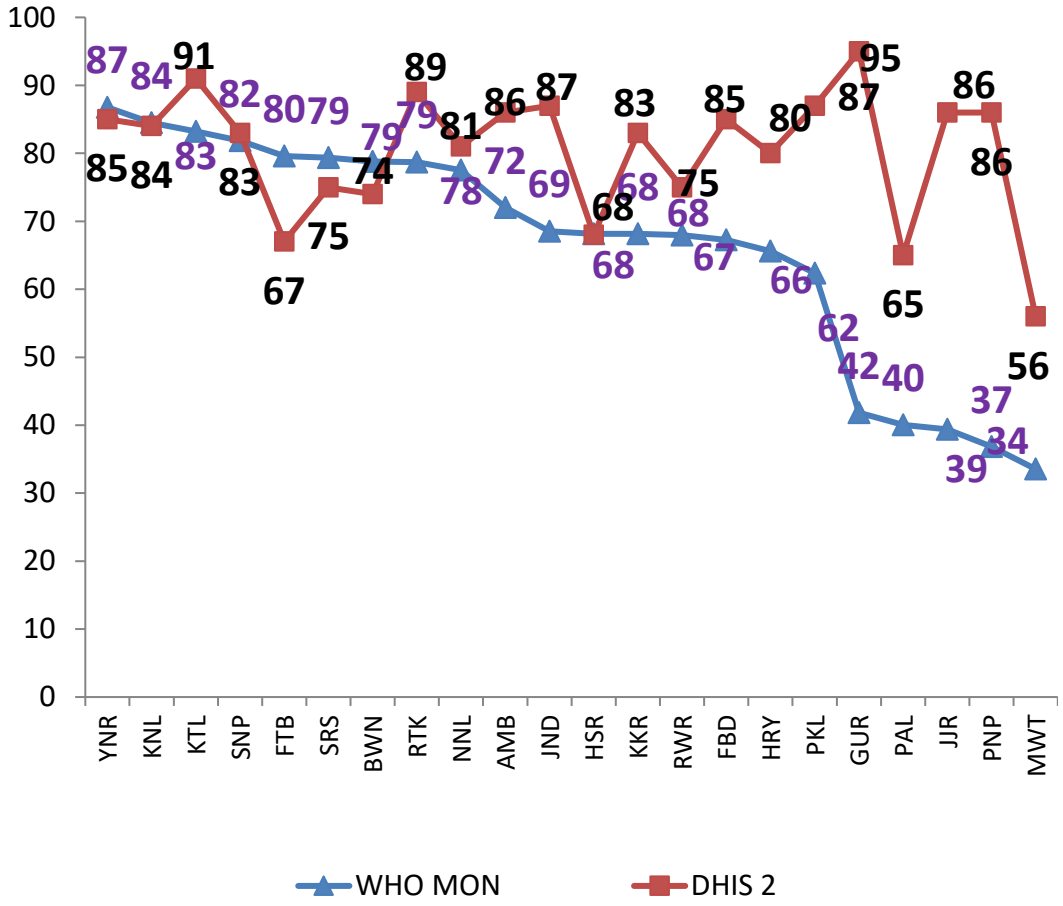


Fig. 2.2.1 (Source : NHM, Haryana database)[12]

Development of RI Logo

The new logo of the baby holding the syringe, indicating RI as his right, has been developed in purple color. This will give RI a distinct identity. Deliberate efforts have been made to stay away from the Polio brand colors of yellow and pink.

Fig. 2.2.2

COVERAGE SURVEY

Full Immunization for the children of age group 12-23 months

Table 2.2.1

Sl. No.	State/UTs/India	DLHS3 (2007-08)	CES (2009)	AHS (2010-11)
1	A & N Islands	83.6		
2	Andhra Pradesh	66.7	68.0	
3	Arunachal Pradesh	13.3	24.8	
4	Assam	50.7	59.1	59
5	Bihar	41.4	49.0	64.5
6	Chandigarh	73.0		
7	Chhattisgarh	59.3	57.3	74.1
8	D & N H	57.9		
9	Daman & Diu	85.7		
10	Delhi	67.3	71.5	
11	Goa	89.8	87.9	
12	Gujarat	54.8	56.6	
13	Haryana	59.6	71.7	
14	Himachal Pradesh	82.2	75.8	

15	Jammu & Kashmir	62.2	66.6	
16	Jharkhand	54.0	59.7	63.7
17	Karnataka	76.7	78.0	
18	Kerala	79.6	81.5	
19	Lakshadweep	86.2		
20	Madhya Pradesh	36.0	42.9	54.9
21	Maharashtra	69.0	78.6	
22	Manipur	47.4	51.9	
23	Meghalaya	33.1	60.8	
24	Mizoram	54.2	73.7	
25	Nagaland*		27.8	
26	Orissa	62.3	59.5	55
27	Pondicherry	80.2		
28	Punjab	79.8	83.6	
29	Rajasthan	48.7	53.8	70.8
30	Sikkim	76.8	85.3	
31	Tamil Nadu	81.6	77.3	
32	Tripura	38.2	66.0	
33	Uttar Pradesh	30.2	40.9	45.3
34	Uttarakhand	62.9	71.5	75.4
35	West Bengal	75.7	64.9	
	INDIA	53.5	61.0	

(Source : http://www.nhp.gov.in/sites/default/files/pdf/immunization_uip.pdf)

OBJECTIVES OF THE STUDY

General objective:

To assess the maternal knowledge , attitude & practices regarding immunization of children of age group 0-6 years

Specific objectives:

- To identify the degree of knowledge of immunization among the respondents.
- To analyze the attitude and practice of immunization among the respondents.
- To determine the association between the knowledge and practice regarding immunization schedule with selected variables among mothers in selected areas at Haryana.

RESEARCH QUESTIONS

The research questions of this study are given below:

- What is the degree of knowledge about immunization among the respondents.
- What is the status of attitude and practice of immunization among the respondents.
- What is the association between the knowledge and practice regarding immunization schedule with selected variables among the respondents.

RATIONALE

The government and various supporting agencies has investing huge amount of fund on the immunization sector but the knowledge, attitude and practice data are not satisfactory as compared to the budget invested. Even the national level data are also insufficient. This study helps to evaluate and create awareness among mothers of children aged 0-6 years; to achieve knowledge, attitude and practices on immunization.

This study can be helpful for NGOs, researchers, policy makers and program planners to review and build up various policies and programs related to immunization and for administrative purpose related to immunization. Similarly, this study will also provide exact situation of immunization in the study area. Also, no similar study has yet been conducted at Haryana.

METHODOLOGY

Study area – various districts of Haryana (Jind ,Karnal & Panchkula)

Type of study – Descriptive study (cross sectional)

Study period – April 2015- May 2015

Study population – Mothers of the children of age group 0-5 years

Sample size – 100 (p=50%, q= 50%, CI= 90%, e= 5%)

Sampling method – Convenient non probability sampling method

RESULTS

The results are mainly divided into following four sections, demographic characteristics of the respondents, knowledge of the respondents about immunization, attitude of the respondent about immunization, and practice of the respondent about immunization which are presented using various mathematical and statistical tools like table; figure, line, bar diagram, pie-chart etc.

Demographic characteristics

This part has included demographic characteristics of the respondents obtained from mothers visiting the session sites at Mission Indradhanush & SNID. The demographic characteristics mainly included age composition, religion, education and occupation.

- **Age group of the respondents**

  Age group of the mothers has numerous use in demographic analysis and has implication for development planning such as ageing of population, dependency, health service requirement for children and mother, identification of the most in-need age group, and related infrastructural requirement. Majority of the mothers lied in the age group 25-30 years. 4% women were in the age group 15-20 years & 27% were in the age group 20-25 years.

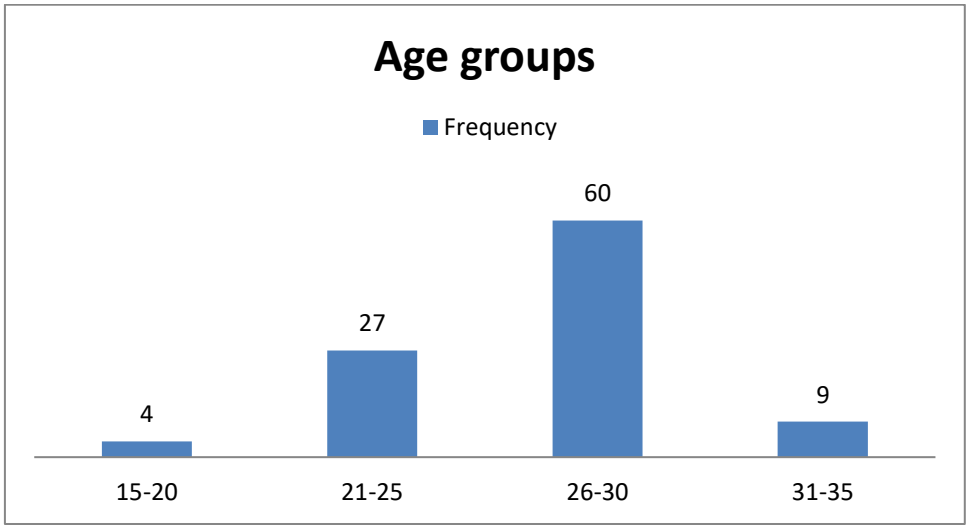


Fig. 2.2.3

- **Religion of the respondents**

74% of the respondents were Hindus, 7% were Muslims &19% were Sikhs. Hence, majority of them were Hindus.

- **Occupation of the respondents**

85% of the respondents were housewives & only 15% were doing jobs. So majority of the sample size were homemakers and thus could give more and attention to their children.

- **Educational status of respondents**

Education is very important part of human life. Education is the only means to get various kinds of knowledge, message, information and notice. The knowledge level of the person is determined by the education he has had. It determines the quality of life. It involves with qualitative aspect of any society and directly affects the various aspects of life like

occupation, income, health, and social condition, level of quality of life, civilization of nation and other aspects of a person or community. In this study researcher has examined the educational status of respondents because the education of the respondents affects the knowledge, attitude and practice of immunization. 43% of the mothers had received intermediate level of education & 28% of them had received education of metric or lesser. 7% of mothers were uneducated.

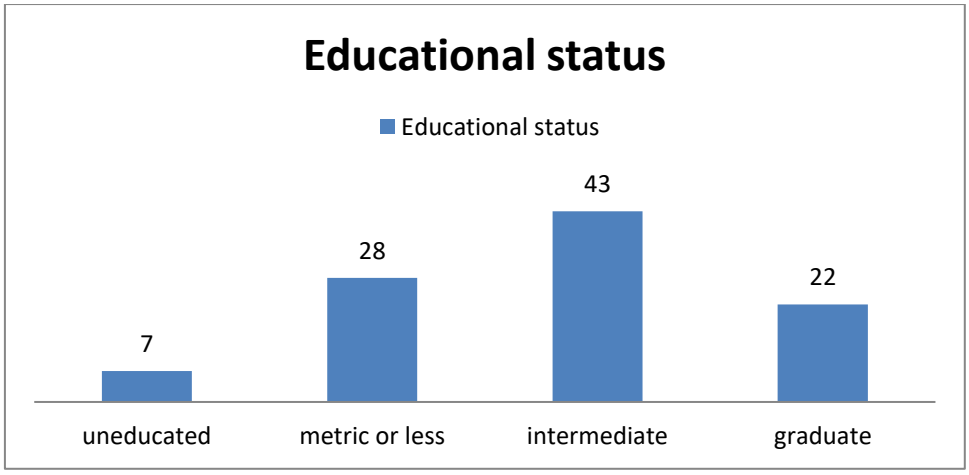


Fig. 2.2.4

Number of children

20% of respondents had 3 children. 56% had 2 children & 24% had 1 child. This also affected the knowledge, attitude & practices of immunization. Mothers with more than 1 child were more aware as they had been informed more number of times.

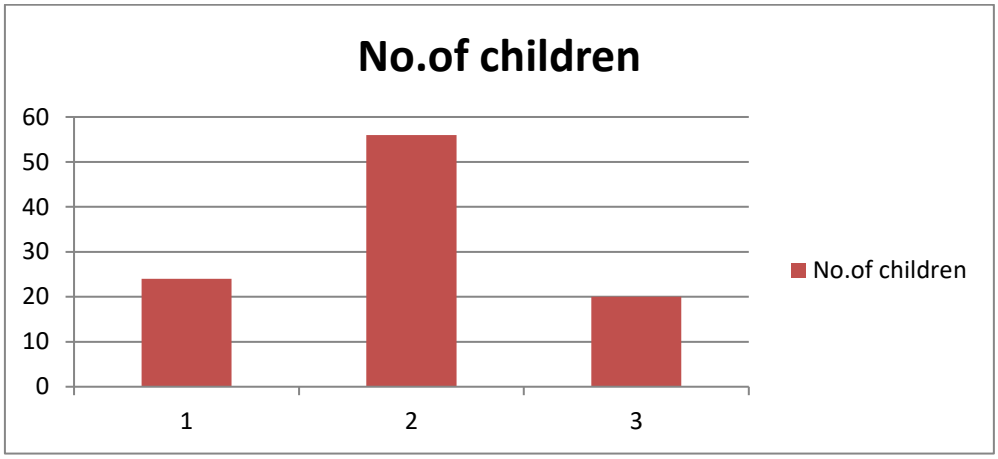


Fig. 2.2.5

Knowledge of the respondents about immunization

Mother's knowledge of immunization plays a vital role to improve their children's health status and their own health. As mother is first instructor of their children, and home is first school. Good knowledge about immunization is crucial for wellbeing and sound health of children. Without proper knowledge one's mother can't immunize her child periodically, effectively and completely. The mother should have knowledge about age of child, immunization time, immunization schedule and doses of immunization. If they ignore about routinely immunization of vaccine like BCG, DPT, Polio, Measles various diseases would affect their child, so immunization knowledge is most essential for mother in order to provide the children better health and to prevent from killer diseases. The results obtained from the study are given below:

Knowledge regarding having heard about child immunization

Mothers have to know why they should immunize the child. Without knowing the correct information they would not be able to sustain their practices of complete immunization to their children.100% mothers had heard about immunization.

Other questions related to knowledge in general included:

The respondents were asked about vaccines' route of administration; 90% of them agreed that vaccines are injections given orally or otherwise to people to protect them from diseases. 72% of the respondents disagreed for all vaccines are given in one dose only. 44% of them disagreed that only children can be immunized against diseases.

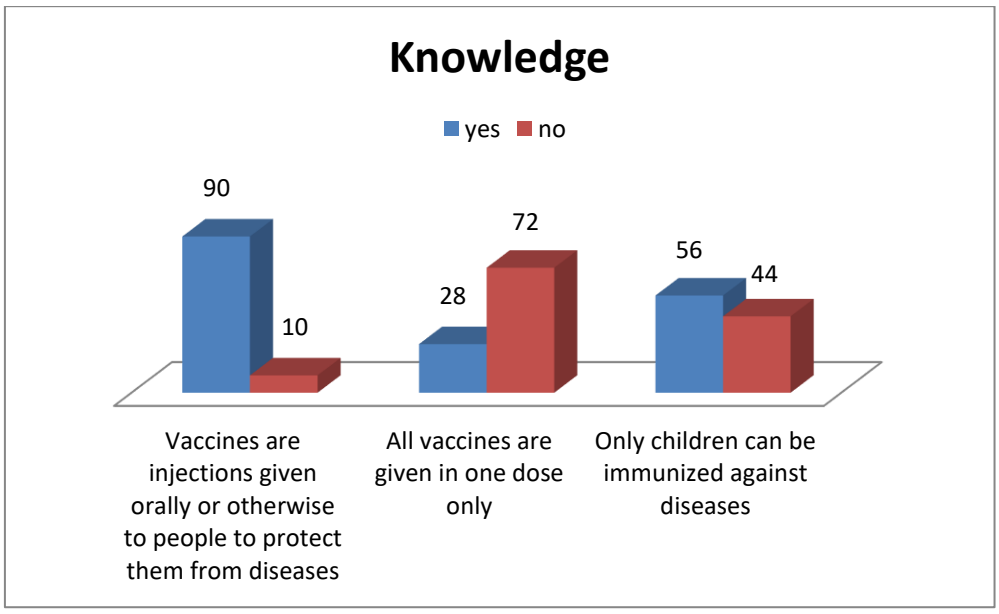


Fig. 2.2.6

Respondents were interviewed regarding various vaccine preventable diseases and their timings. 97% of the mothers knew about polio vaccine.

77% of mothers knew about Diptheria & its vaccine, 63% knew about pertussis & 62 % knew about tetanus. Only 27% knew about Hepatitis B. Very low percentage of mothers knew about measles & influenza.

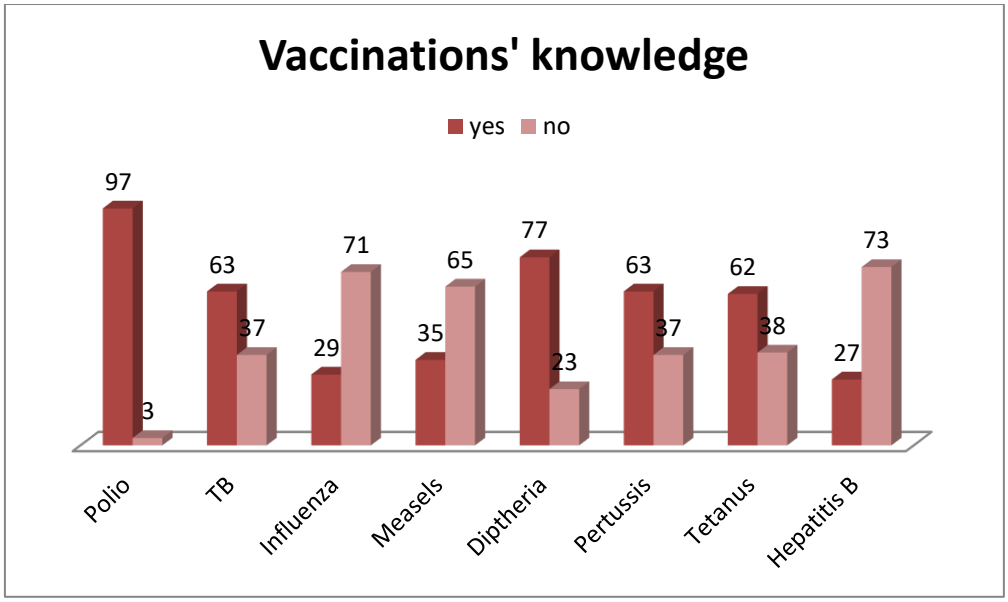


Fig. 2.2.7

When asked that if children do not receive all their vaccine doses for vaccine preventable diseases, the vaccine may not work to prevent diseases, 90% of mothers agreed.

Also they were interviewed about children developing fever after immunization, which 77% of women found true.

Attitude of the respondents about immunization

Mothers were interviewed to analyze their attitude regarding immunization. Around 89% of them felt that immunizations are beneficial for children. 71% agreed that immunizations should be made compulsory for all children. 53% of respondents agreed that some diseases cannot be prevented by immunizations, still immunizations are necessary to keep them healthy throughout life. 46% felt that all vaccines are expensive and 70% supported the statement that the government should provide free vaccines for all children. 5% agreed that vaccines are harmful for children considering the side effects. They were counseled & motivated thereafter. 98% of the women were immunized themselves.

Table 2.2.2

	Attitude1	Attitude 2	Attitude 3	Attitude 4	Attitude 5	Attitude 6	Attitude 7	Attitude 8	Attitude 9
SD	0	0	0	0	0	0	0	9	0
D	0	0	0	0	2	0	0	66	0
N	11	29	47	56	52	30	38	20	21
A	81	68	53	44	46	68	59	5	73
SA	8	3	0	0	0	2	3	0	6

Source of information

33% of the mothers were informed about immunization through health workers. 32% received information through television; 22% through newspapers & 13% through radio. Health workers formed an essential source of information regarding immunization.

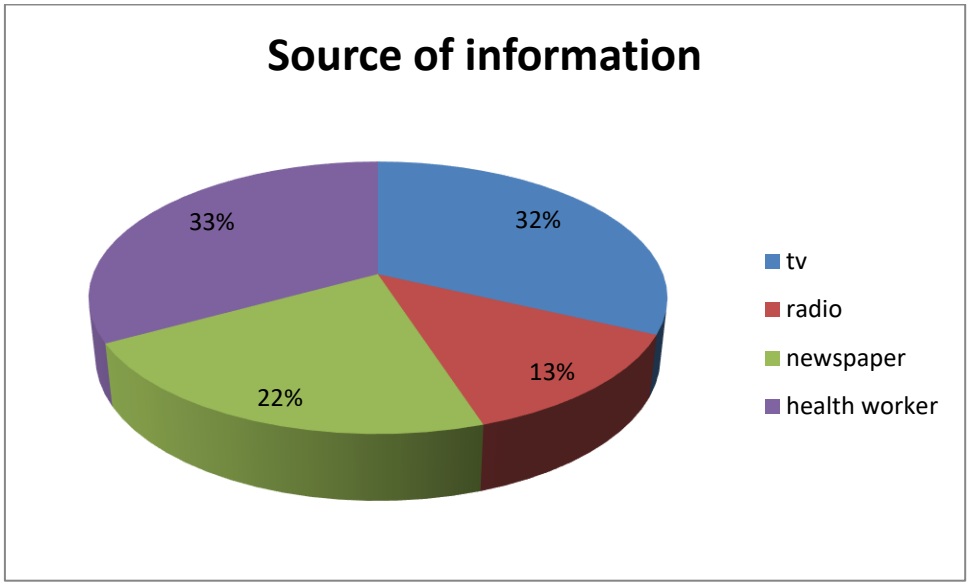


Fig. 2.2.8

Practices regarding immunization

The respondents were asked the reasons for getting their children immunized through RI .Majority of them gave the reason as prevention of diseases (79%). 11% followed it because of government compulsion & rest 10% followed it since their friends and family were doing that.

The respondents were interviewed regarding reasons why people don't their children immunized. Majority of them cited the reason to be fear of AEFI which included fever, swelling etc. which accounted for 50%. 25% gave the reason to be no faith in this activity & 14% felt it was because of ignorance. 11% felt it was harmful for children, they were counseled thereafter.

Mothers were also asked if the children vaccinated in household suffer from any adverse reaction following vaccination during the last RI round. 75% agreed about occurrence of adverse effects following immunization. Also they were asked if they would advise vaccination to others. 99% of mothers affirmed that they would advise others.

The respondents were interviewed regarding immunization timing of their children for BCG, DPT/Pentavalent & Polio vaccines.

92% of mothers reported having immunized their children for BCG at birth & 8% within 1 year. 94% of mothers had got their children immunized for DPT/ Pentavalent. All the respondents had their children immunized for polio.

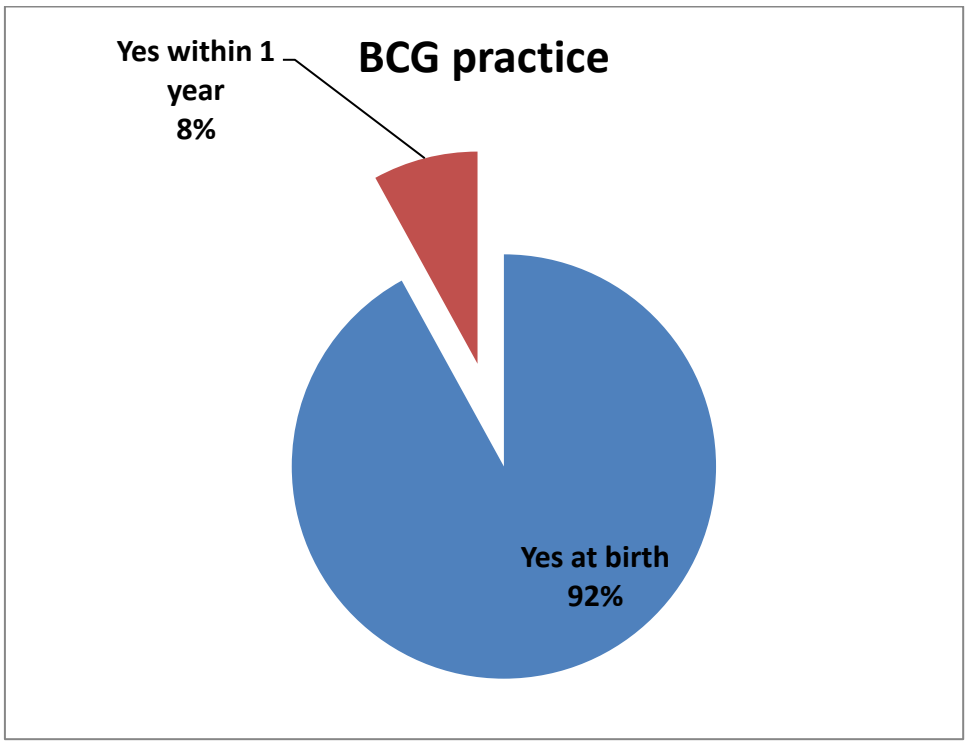
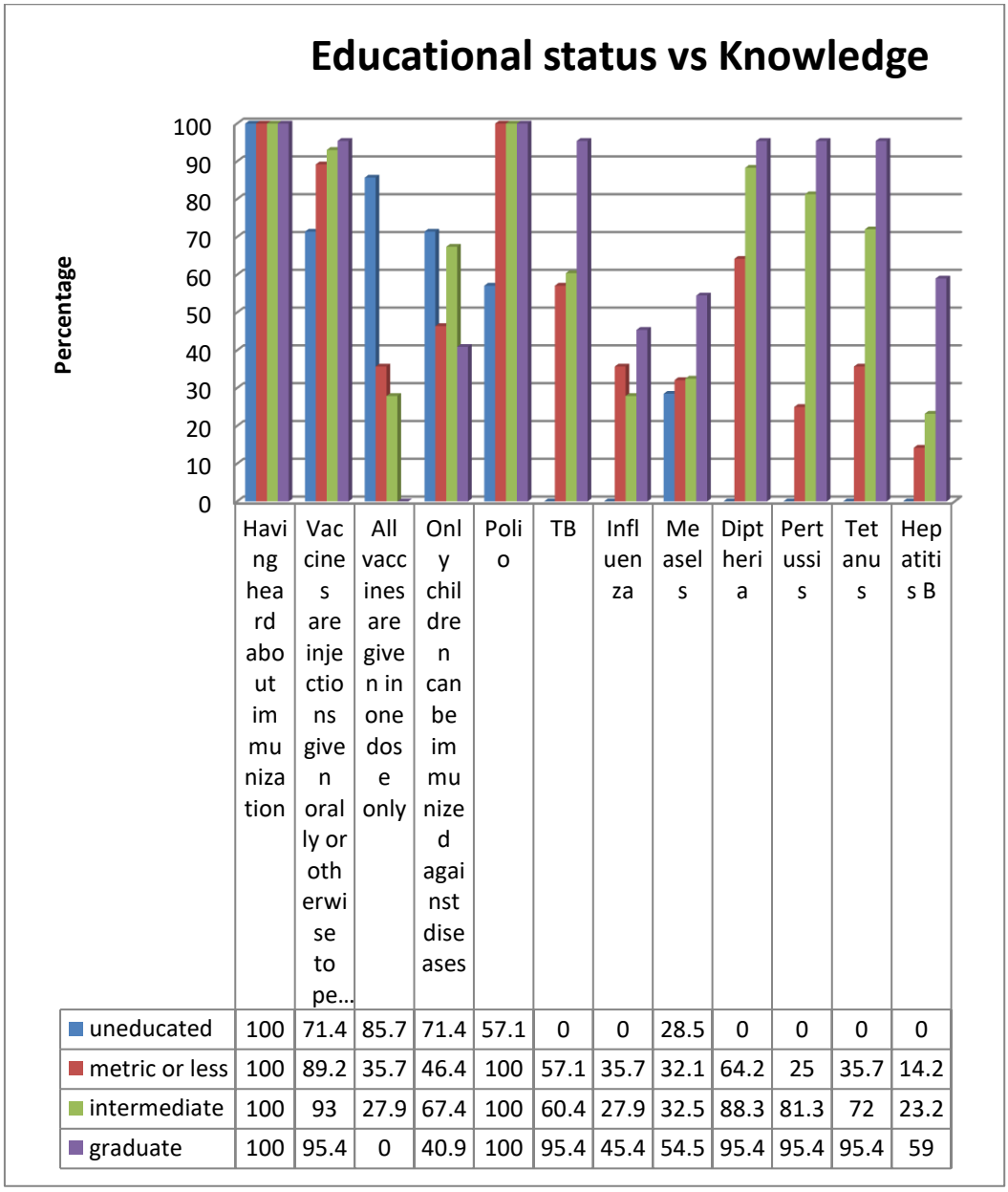


Fig. 2.2.9

OTHER FINDINGS

Educational status plays an important role in knowledge status of a person. Most of the graduate mothers had correct knowledge regarding immunization. Mothers with intermediate level of education were high amongst the sample. Level of knowledge was found in correspondence to the educational status.



	Having heard about immunization	Vaccines are injections given orally or otherwise to pe...	All vaccines are given in one dose only	Only children can be immunized against diseases	Polio	TB	Influenza	Measels	Diptheria	Pertussis	Tetanus	Hepatitis B
uneducated	100	71.4	85.7	71.4	57.1	0	0	28.5	0	0	0	0
metric or less	100	89.2	35.7	46.4	100	57.1	35.7	32.1	64.2	25	35.7	14.2
intermediate	100	93	27.9	67.4	100	60.4	27.9	32.5	88.3	81.3	72	23.2
graduate	100	95.4	0	40.9	100	95.4	45.4	54.5	95.4	95.4	95.4	59

Fig. 2.2.10

Educational status versus source of information

Mothers with low educational status were found to be more informed by health workers. Newspapers were the source of information mainly for respondents with graduate level of education (13%). Television was found to be a source of information for respondents with different educational statuses in nearly same percentages.

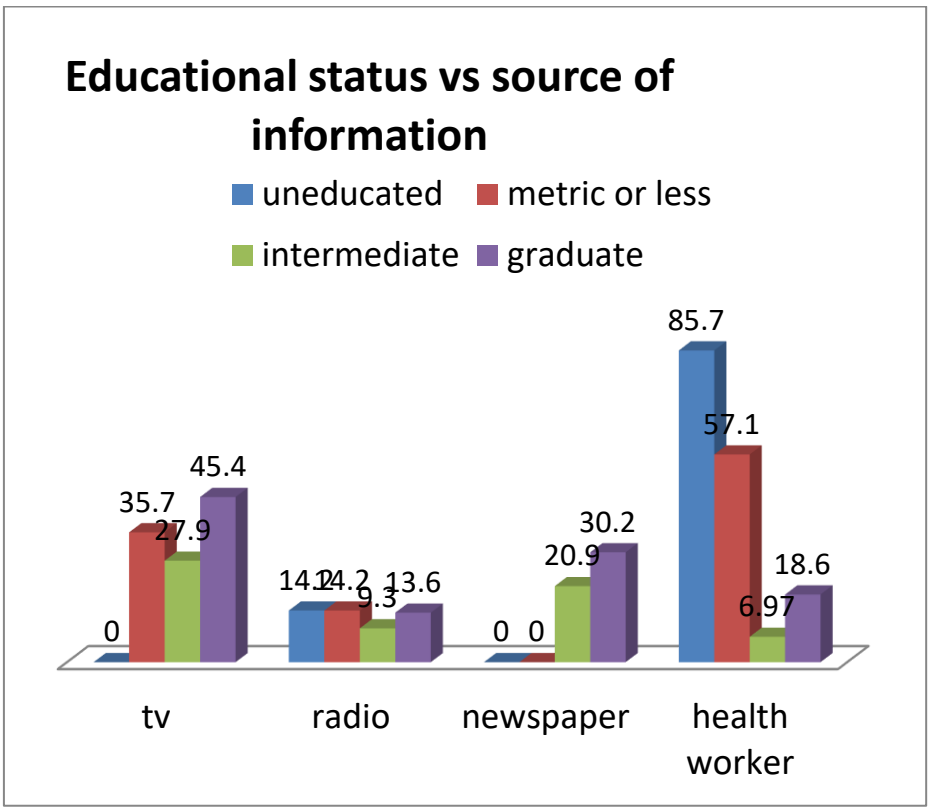


Fig. 2.2.11

Respondents with graduate level of educational status had lesser no. of children. None of them had 3 children. 33 women with intermediate level of education had 2 children. Number of children borne by a woman was found to be indirectly related to her educational status.

Table 2.2.3

Education/No. of children	1	2	3
uneducated	2	2	3
metric or less	8	8	12
intermediate	5	33	5
graduate	9	13	0

Sample distribution

68% of the respondents were from Jind & 15 % from Karnal districts.

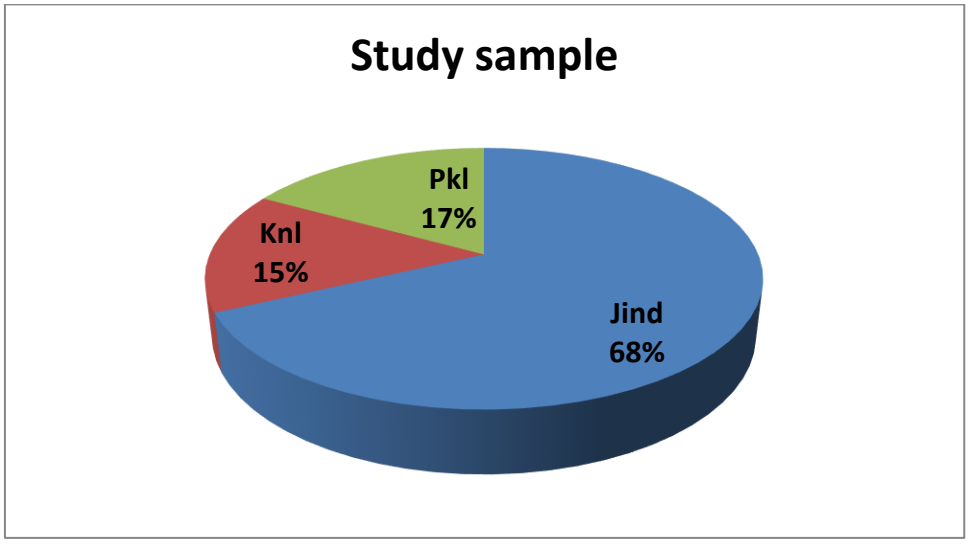


Fig. 2.2.12

Area versus educational status

5 of the uneducated respondents were from Jind which accounts for its 7.35%. Greatest proportion of mothers from all districts had received intermediate level of education.

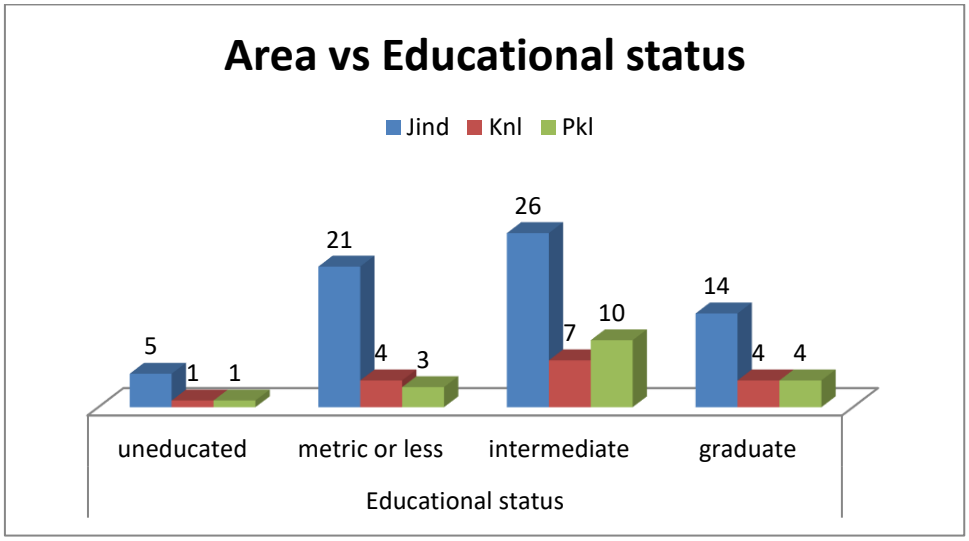


Fig. 2.2.13

DISCUSSION

From the study carried out at Jind , Karnal & Panchkula about knowledge, attitude and practice behavior of mothers group of reproductive age having at least one child of age 0- 5 years, found a number of facts which are discussed here.

The percent of 15-19 age group mothers are found to be 4 percent. At this stage female is not fully prepared for child bearing and they are not well educated. This directly hampers mother's knowledge, attitude and practice on immunization. So this age factor plays a vital role in knowledge, attitude and practice regarding immunization. Amongst the respondents 74% were Hindus, 7% were Muslims & 19% were Sikh. Few of the old Muslim females said that immunization causes fever and diarrhoea. So, in some extent the religion also becomes a deciding factor for knowledge, attitude and practice of immunization. Among 100 respondents, 43% had received intermediate education. 28% had educational level of metric or less and 22% had completed graduation. 7% of the mothers were uneducated.

Illiterate person lacks knowledge in each and every sector as compared to an educated person, which finally affects the knowledge, attitude and practice of immunization. So the literacy rate on the study area is considerably satisfactory.

15 % of the respondents were involved in some profession and rest 85%

were housewives. It is clear that when both parents are busy with their jobs, they pay less attention to children and lack higher degree of knowledge attitude and practice on immunization.

It was found that 100 percent of respondents had heard about immunization which is highly appreciable. Mother's knowledge of immunization plays a vital role to improve their children's health status and their own health. The respondents were asked about vaccines' route of administration; 90% of them agreed that vaccines are injections given orally or otherwise to people to protect them from diseases. 72% of the respondents disagreed for all vaccines are given in one dose only. 44% of them disagreed that only children can be immunized against diseases.

Respondents were interviewed regarding various vaccine preventable diseases and their timings. 97% of the mothers knew about polio vaccine. 77% of mothers knew about Diptheria & its vaccine, 63% knew about pertussis & 62 % knew about tetanus. Only 27% knew about Hepatitis B. Very low percentage of mothers knew about measles & influenza. Mothers were interviewed to analyze their attitude regarding immunization. Around 89% of them felt that immunizations are beneficial for children. 71% agreed that immunizations should be made compulsory for all children. 53% of respondents agreed that some diseases cannot be prevented by immunizations, still immunizations are necessary to keep them healthy throughout life. The respondents were asked the reasons for

getting their children immunized through RI .Majority of them gave the reason as prevention of diseases. 98% of the women were immunized themselves.

They were interviewed regarding reasons why people don't their children immunized. Majority of them cited the reason to be fear of AEFI which included fever, diarrhoea, swelling etc.

Mothers were also asked if the children vaccinated in household suffer from any adverse reaction following vaccination during the last RI round. 75% agreed about occurrence of adverse effects following immunization. Also they were asked if they would advise vaccination to others. 99% of mothers affirmed that they would advise others.

Educational status plays an important role in knowledge status of a person. Most of the graduate mothers had correct knowledge regarding immunization. Mothers with intermediate level of education were high amongst the sample. Level of knowledge was found in correspondence to the educational status. The respondents were interviewed regarding immunization timing of their children for BCG, DPT/Pentavalent & Polio vaccines. 92% of mothers reported having immunized their children for BCG at birth & 8% within 1 year. 94% of mothers had got their children immunized for DPT/ Pentavalent. All the respondents had their children immunized for polio.

CONCLUSION

This study was conducted at Jind , Karnal & Panchkula districts of Haryana to evaluate & understand the degree of knowledge, attitude and practice of immunization among mothers who have atleast one under 5 year child. After analyzing and interpreting the data it was found that majority of the respondents were housewives. Significant numbers of respondents were found literate and majority of the literate respondents had completed primary and secondary level of education. Knowledge attitude and practices of immunization among mothers are influenced by their education, occupation and family type.

Knowledge attitude and practices of immunization was not found so satisfactory, especially knowledge level of respondents. Many of the mothers were found not having proper knowledge of immunization schedule, immunization time of a child, doses of vaccine and knowledge about preventive disease of vaccine. Some of the mothers were found immunizing their children without understanding the importance of immunization. They are immunizing their children only by imitating others or due to government's pressure.

High proportion of mothers didn't know the specific function of vaccines given to children to prevent from specific diseases. Most of them

answered by guessing the probable reason of child immunization but were

unknown about the specific reason of child immunization and specific function of each vaccine. Attitude and practices of mother's were found better than degree of knowledge regarding immunization.

Recommendations

- Health education campaign should target mothers to improve the child health status and to achieve the targets of immunization.
- Community participation and sustained public awareness are needed to erode fears of AEFI.
- The focus of immunization awareness activities should be immunization providers i.e. ANMs
- Promote the timely & regular updating of MCP cards along with counter files.
- Focused counseling of parents should be done to overcome fear of AEFI.

BIBLIOGRAPHY

1.NRHM Haryana website *http://www.nrhmharyana.gov.in/page.aspx?id=12#*

2. http://www.medindia.net/patients/paediatrics/immunisation.asp#ixzz10FilGY75

3. Park. K. "Community health nursing principles and Practice", 1st Edition, Kumar publishing house, Pitampura, Delhi: 2007.P- 378-439.

4. UNICEF and WHO, "promises and achievement and missed opportunities an analysis of trends, level and differentials, 1990-2001. March -04.

5. Gulani K.K, "Community health nursing principles and practice" 1st edition, Kumar publishing House, Pitampura, Delhi: 2007 P 378-439.

6. http://en.wikipedia.org/w/index.php.

7. http://en.wikipedia.org/wiki/immunisation#active .

8. DeWalt & Hink, 2009; Sanders, Thompson, & Wilkinson, 2007

9. Deady, J., & Thornton, L. (2005). *Parents knowledge and attitude towards immunization* Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15782724

10. Dhelmann, T. (2007). *Knowledge, perception and beliefs about childhood immunisation and attitude towards uptake of poliomyelitis immunization in Nort.* Retrieved from http://www.comminit.com/?q=polio/content/knowledge-perception-and-beliefs-aboutchildhood-immunisation-and-attitude-towards-uptak

11. Universal immunization Program http://www.nhp.gov.in/sites/default/files/pdf/immunization_uip.pdf

12. NHM, Haryana database.

ANNEXURE 1.

MATERNAL KNOWLEDGE , ATTITUDE & PRACTICES REGARDING IMMUNIZATION OF CHILDREN OF AGE GROUP 0-5 YEARS

QUESTIONNAIRE

1. Age
2. Occupation – Housewife/ working
3. Religion
4. Educational status

   Uneducated/metric or less/intermediate/ Graduate
5. Address
6. No. of children
7. Have you ever heard of the terms ‘immunizations’ or ‘vaccinations’?

   Yes/ No
8. Vaccines are injections or substances orally or otherwise given to people to protect them from diseases.
   Yes / No
9. All vaccines are given in one dose only.
   Yes/ No
10. Only children can be immunized against disease.
    Yes/ No
11. Do you know about the following diseases and the age at which their vaccinations are done?

I. Polio	II. TB
III. Influenza	IV Measles
V. Diptheria	VI. Pertussis
VII. Tetanus	VIII. Hepatitis B

12. Some vaccines are given several times to prevent diseases. For such vaccines, if children do not receive all their vaccine doses, the vaccine may not work to prevent diseases.
    True / False

13. When children are immunized they may develop fever.
True/ False

Now, a few questions about your feelings about immunizations follow. For each of the following, please indicate your position on the issue by circling the number that corresponds to your opinion.

The options are: Strongly Disagree = SD (1), Disagree=
D (2), No Opinion = N (3), Agree= A (4), and Strongly agree =SA (5)

		SD	D	N	A	SA
1.	In general, immunizations are beneficial for children.	1	2	3	4	5
2.	Immunizations should be made compulsory for all children	1	2	3	4	5
3.	Some diseases cannot be prevented by immunizations, and children often suffer from them. Despite this, immunizing children can ensure that they are healthy throughout childhood.	1	2	3	4	5
4.	Vaccines are one of modern science's greatest discoveries.	1	2	3	4	5
5.	All vaccines are expensive.	1	2	3	4	5
6.	The government should provide free vaccines for all children.	1	2	3	4	5
7.	If vaccines were free, all children would be immunized.	1	2	3	4	5
8.	Vaccines are harmful to children.	1	2	3	4	5
9.	The benefits associated with immunization of children far outweigh the potential risks associated with vaccines.	1	2	3	4	5

14. Have you ever been immunized yourself?
Yes/ No

15. Source of first information about immunization?

T.V / Radio / Newspapers / Health workers / Others

16. What is the purpose of immunization?

Disease prevention / Don't know/ other reasons

17. You immunized your child through RI because:

a. Friends and relatives are following it.

b. Government convinced.

c. It is highly publicized.

d. It prevents diseases.

e. Other reasons.

18. Why do you think people don't get their children immunized?

a. Harmful for children.

b. No faith in this activity.

c. Ignorance

d. Other reasons.

19. Has your child/ children been immunized for BCG?
Yes (at birth) / Yes (within 1 year) / No

20. Has your child been immunized for DPT/ Pentavalent ?
Yes / No

21. Has your child been immunized for Polio ?
Yes / No

22. Were the children in your household vaccinated during the previous round of RI held?

Yes/ No

23. Did the children vaccinated in your household suffer from any adverse reaction following vaccination during the last RI round?

Yes/ No

24. Would you advise vaccination to others?
Yes/ No