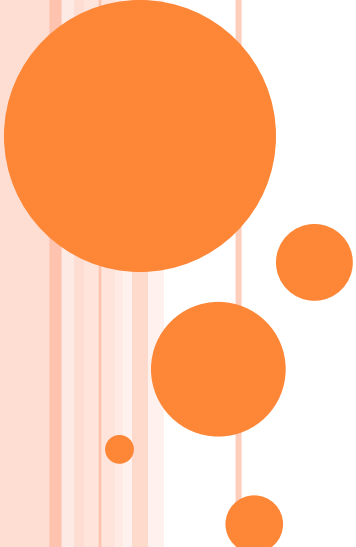


STUDY ON CHILD IMMUNIZATION COVERAGE : DETERMINANTS AND BARRIERS IN URBAN AREA OF SURENDRANAGAR DISTRICT, GUJARAT.



Dr. Hirkani Madnaik

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- Rationale
- Objective
- Research methodology
- Result
- Conclusion
- Recommendations



INTRODUCTION

- Child Immunization is most important public health intervention.
- Immunization is most cost effective measure in order to control and reduces child morbidity and mortality due to infectious disease.
- E.g. Effective implementation and achieving maximum coverage of small pox vaccination in Year 1977 India became small pox free country.
- In 1985 government of India started Universal Immunization Programme to control six major vaccine preventable disease namely
 - Tuberculosis
 - Polio
 - Diphtheria,
 - Pertussis,
 - Tetanus and
 - Measles,
 - later on Hepatitis B, Influenza, Japanese Encephalitis vaccines also added into this programme



- NPP 2000 has objective of achievement of universal immunization. But which has still not achieved.
- So poor coverage of immunization is big challenge in eradicating of vaccine preventable diseases



LITERATURE REVIEW

- National family health survey 3 shows results that only 44 percent of children of age between 12 to 23 month fully vaccinated while 5 percent have not received any vaccinations,
- Coverage of BCG, DPT and polio are much higher than for all vaccination,
- only 36 percent were fully vaccinated before at their first birthday.
- Major determinants and barriers indentified in this study were
- Relationship between birth order is consistently negative for all vaccinations.
- Mothers with poor education qualification were less likely completes their child vaccination.



- UNICEF's Coverage Evaluation Survey in year 2009 shows 61 percent children are fully vaccinated.
- 86 percent children were vaccinated with BCG vaccination. .
- Around 17.7 percent children dropped out between BCG and DPT3, 10.3 percent between DPT1 and Measles and 13.3 percent between DPT1 and DPT3.
- Full immunization coverage was lower among children of illiterate mothers (45.3 percent) compared with children of mothers who had completed at least higher secondary education (76.6 percent).
- Only 47.3 percent of children from lowest quintile households were fully immunized compared with 75.5 percent of children from highest quintile households



OBJECTIVE

- To assess the immunization coverage of child of age between 12 months to 24 months in slum and non slum of urban area of Surendranagar district.
- To identify determinants and barriers for immunization of child of age between 12 months to 24 months in urban area of Surendranagar district.
- To assess the level of knowledge of mother about child immunization.



METHODOLOGY

○ Study Design

The study design used was Cross-sectional study

○ Study Area

- This study carried out in three major cities namely Surendranagar, Wadhwan, Dhragnadhra of Surendranagar district of Gujarat state which are covered under National Urban Health Mission.

○ Study subjects-

- A woman having at least single child of age between 12 months to 24 months during study period was selected for this study.



○ Sampling procedure

- ❑ Cluster sampling method was used;
- ❑ Clusters were formed as per existing municipal corporation wards.
- ❑ So total 13 clusters were selected by using simple random method.

S r no.	Name of City	Total No. of clusters (wards)	No. of clusters selected	No. of respondents Per cluster	Total no of respondents
1	Surendrangar	14	5	15	75
2	Wadhwaan	13	4	10	40
3	Dhangdhra	13	4	8-9	35

○ **Selection of respondents in cluster.**

- ❑ In each cluster single lane was randomly selected,
- ❑ In the lane, starting from right hand side visited those household which fulfil selection criteria of study,
- ❑ At end of lane turned to opposite side visiting household of opposite side of lane
- ❑ This process was continued till required no. of respondents were interviewed.

○ **Sample size**

- ❑ Total 150 respondents were interviewed in three cities.



○ **Data collection**

A. Technique.

- Personal interview conducted with mothers for data collection

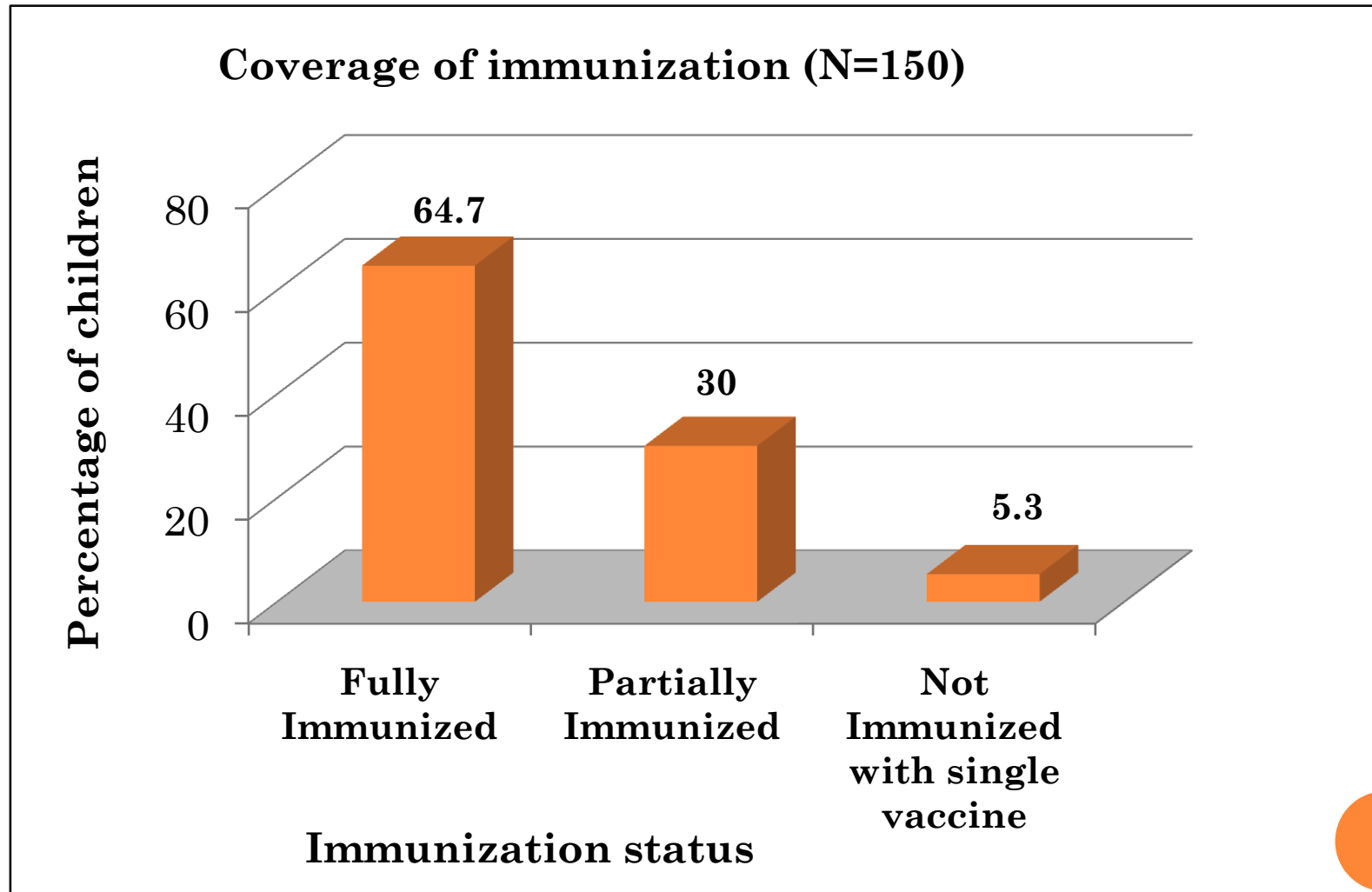
B. Tool

- Semi structured questionnaire was prepared for data collection



RESULT

2.1 COVERAGE OF IMMUNIZATION

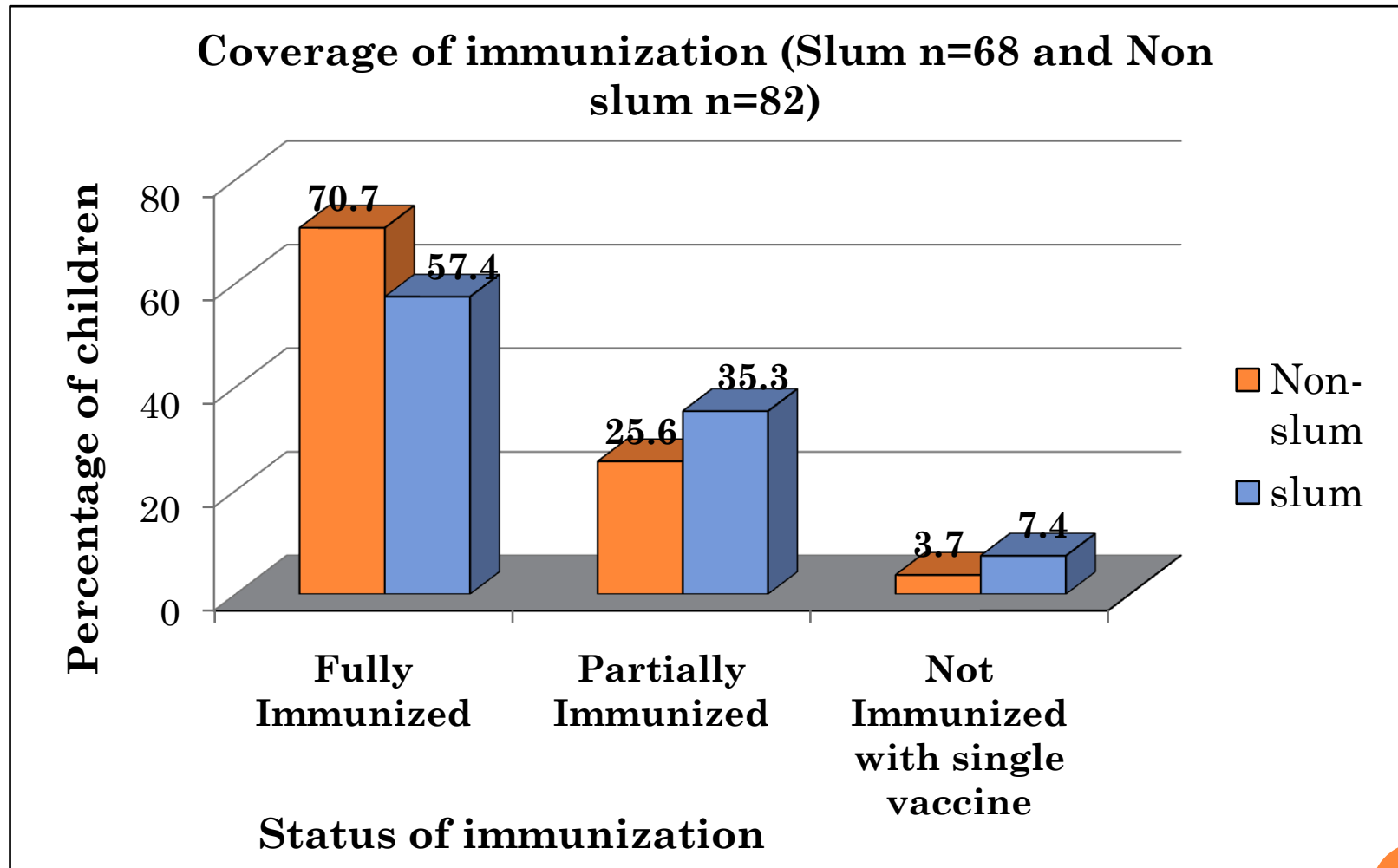


2.2 CHILD'S IMMUNIZATION STATUS

Sr. No	Name of vaccine	Percentage of children immunized		
		Slum	Non-slum	Total
1	BCG	88.2	91.5	90
2	OPV 0	85.3	92.7	89.3
3	DPT 1	80.9	95.1	88.7
4	DPT 2	73.5	89	82
5	DPT 3	61.8	79.3	71.3
6	OPV 1	75	89	82.7
7	OPV 2	70.6	84.1	78
8	OPV 3	61.8	78	70
9	Measles	67.6	78	73.3
Total no. of children		82	68	150

- ❑ Table shows that percentage of vaccinated children in non slum is higher than that of slum area
- ❑ And also percentage of vaccination decreases from above downwards (except DPT3 to measles)

2.3 COVERAGE OF IMMUNIZATION



2.4 DROPOUT RATE

Sr. No.	Vaccine	Slum	Non-slum	Total
1	BCG to DPT1	8.28	-3.93	1.44
2	BCG to DPT3	29.93	13.33	20.78
3	BCG to Measles	23.36	14.75	18.56
4	DPT 1 to DPT3	23.61	16.61	19.62
5	DPT1 to Measles	16.44	17.98	17.36

Note- Calculation of Dropout rate for ex-Dropout rate from BCG to Measles is coverage of BCG minus coverage of measles divided by coverage of BCG

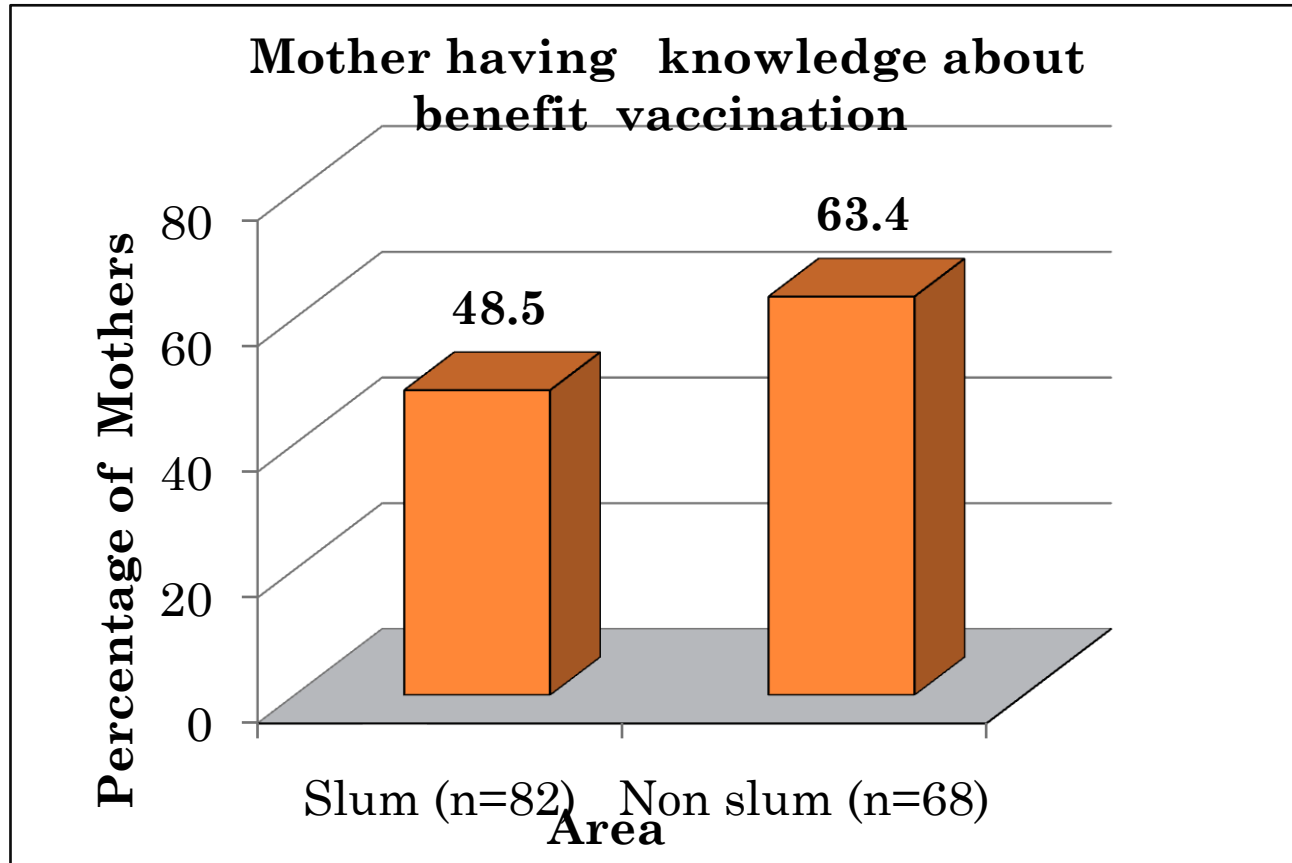
2.5 REASONS FOR ZERO AND PARTIAL IMMUNIZATION

Sr. no	Reasons	Percentage of children who not received single Vaccine	Percentage of children which are partially immunised	Total
1	Fear of post vaccination complications /Child had post immunization complications	62.5	40	43.4
2	Pre-occupied with work	37.5	28.9	30.2
3	Lack of Knowledge	75	17.7	26.2
4	Child was ill	0	26.6	22.6
5	Missed date of vaccination	0	24.4	20.7
6	Husband or in laws does not allow to get child immunized	37.5	17.7	20.7
7	Not properly informed by FHW ASHA	0	17.7	15.1

2.5 REASONS FOR ZERO AND PARTIAL IMMUNIZATION

Sr. no	Reasons	Percentage of children who not received single Vaccine	Percentage of children which are partially immunised	Total
8	Don't know about site/place and time of vaccination	25	11.1	13.2
9	Don't feel it is necessary	25	4.4	7.5
10	Health worker behaviour not good.	0	2.2	3.7
11	Don't have belief on service provider	25	0	3.7
12	Religion	12.5	0	1.89
13	Cost is much high	0	2.2	1.8
14	Other	0	8.89	7.55

3.1 MOTHER'S KNOWLEDGE ABOUT BENEFIT OF VACCINATION



As shown fig. Almost two-third of mothers in non slum area knows about benefit of child vaccination, while in slum area less than half no. of mothers knows about benefits of vaccination.

3.2 MOTHER HAVING KNOWLEDGE ABOUT VACCINES.

Sr. No	Name of Vaccine	Slums			Non-Slums			Total		
		Volunt	After probing	Don't know	Volunt	After probing	Don't know	Volunt	After probing	Don't know
1	BCG	10.3	32.4	57.4	22	46.3	31.7	16.7	40	43.3
2	Polio	10.3	47.1	42.6	19.5	62.2	18.3	15.3	55.3	29.3
3	DPT	7.4	14.7	77.9	13.4	47.6	39	10.7	32.7	56.7
4	Measles	14.7	32.4	52.9	26.8	43.9	29.3	21.3	38.7	40



3.3 MOTHER HAVING KNOWLEDGE OF DOSES OF VACCINES

Sr. no	Name of Vaccine	Slum	Non-slum	Total
1	BCG	16.2	30.5	24
2	Polio	1.5	7.3	4.7
3	DPT	5.9	14.6	10.7
4	Measles	13.2	19.5	16.7

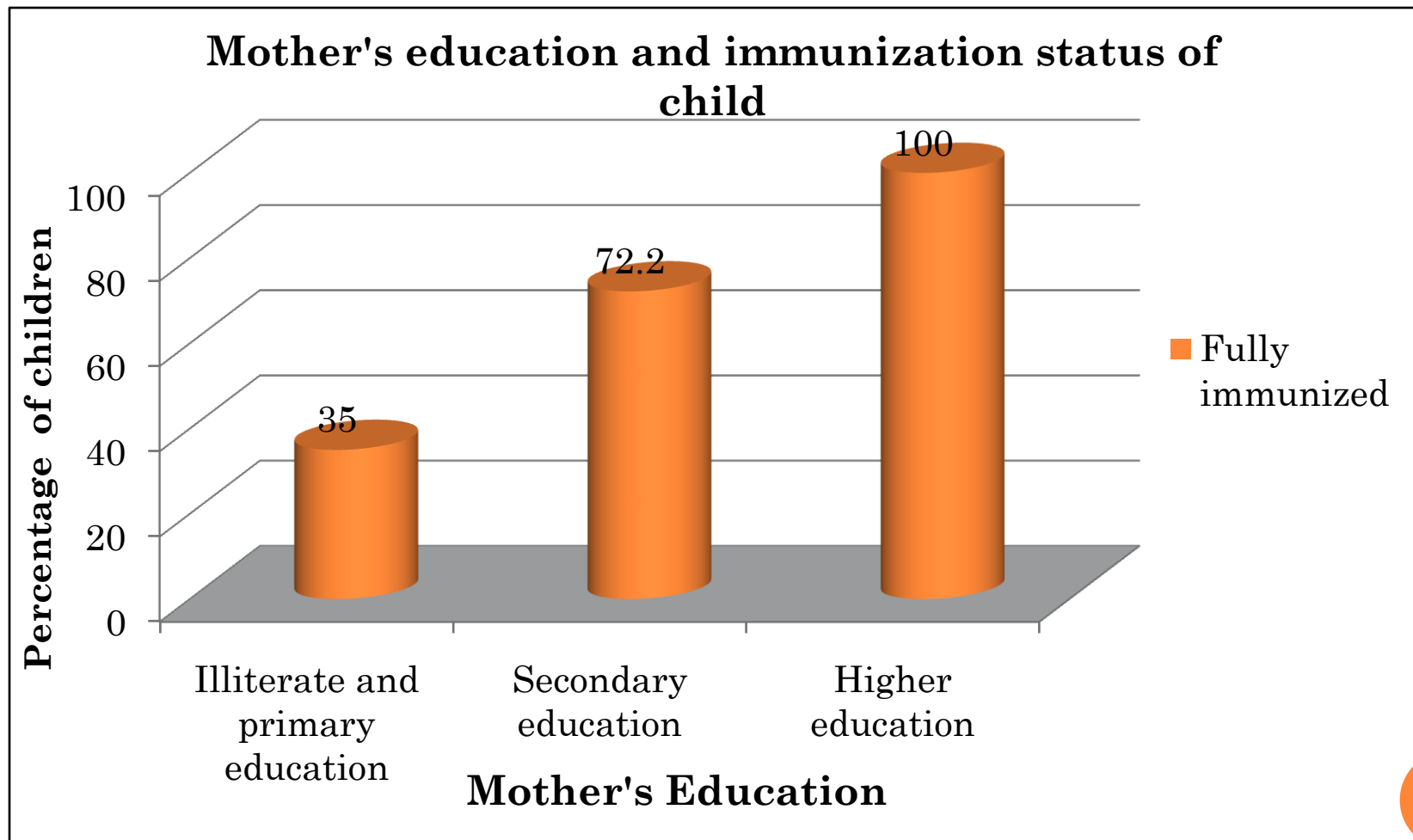
3.4 MOTHER HAVING KNOWLEDGE OF RIGHT AGE FOR DIFFERENT VACCINATION.

Sr. No.	Name of Vaccine	Slum	Non-slum	Total
1	BCG	16.2	28	22.7
2	Polio	0	3.7	2
3	DPT	4.4	7.3	6
4	Measles	10.3	12.3	11.3

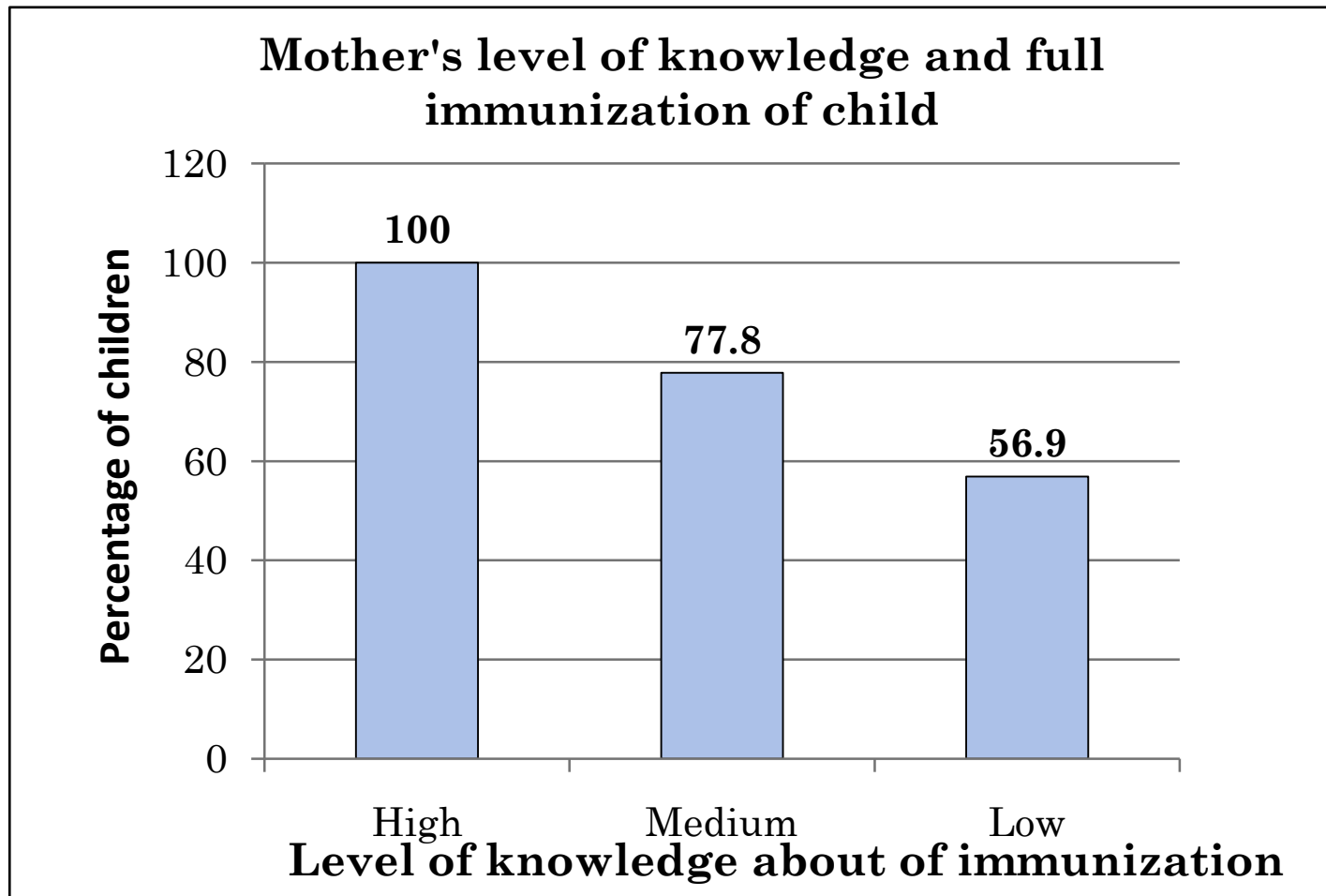


4.0 FACTORS INFLUENCING COVERAGE OF IMMUNIZATION

4.1 MOTHER'S EDUCATION AND IMMUNIZATION STATUS OF CHILD



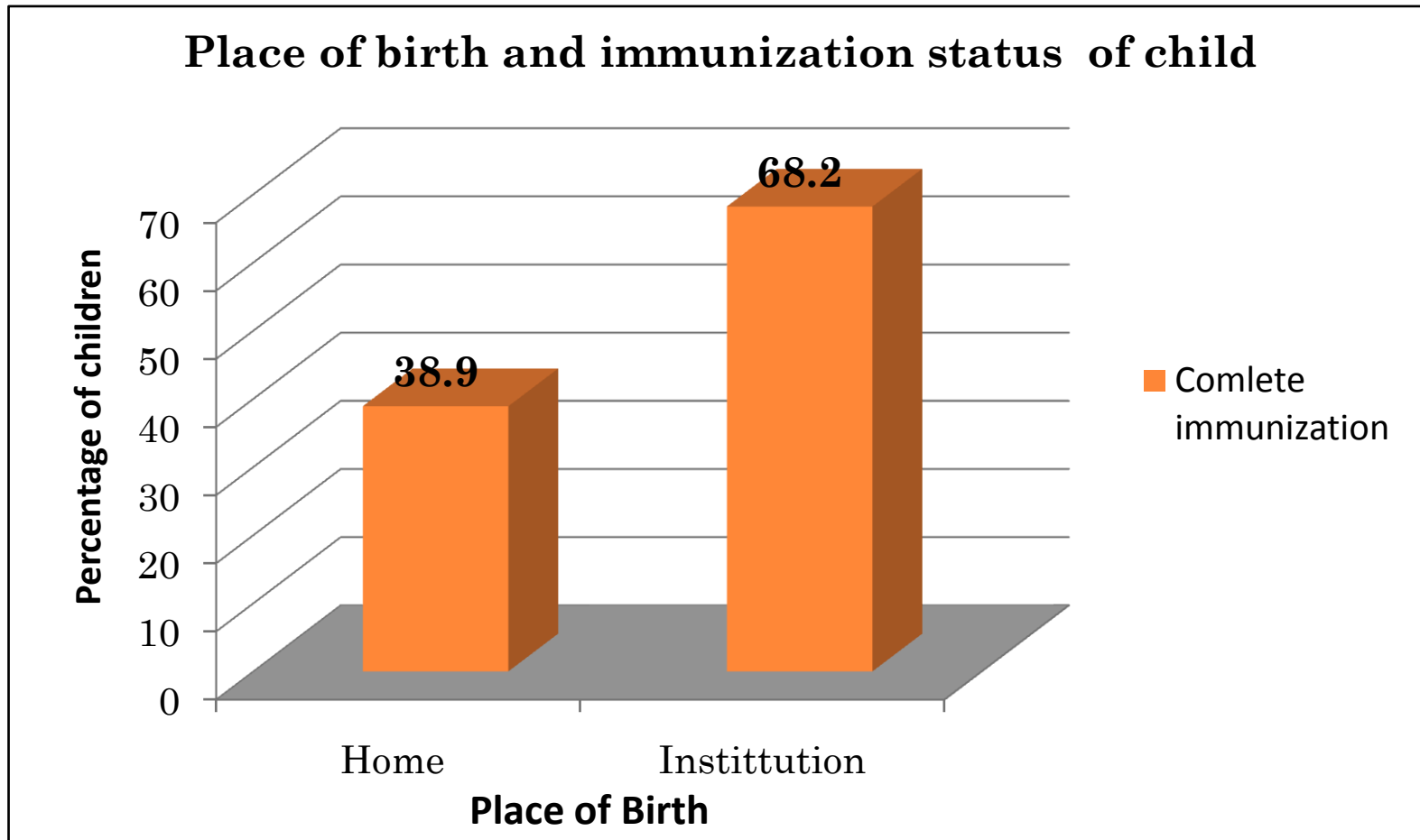
4.2 MOTHER'S LEVEL OF KNOWLEDGE ABOUT IMMUNIZATION AND STATUS OF CHILD IMMUNIZATION



(Note – High level of knowledge(score 25-36) n=14, Medium level (score13-24) n= 27, Low level (score0-12) n=109)



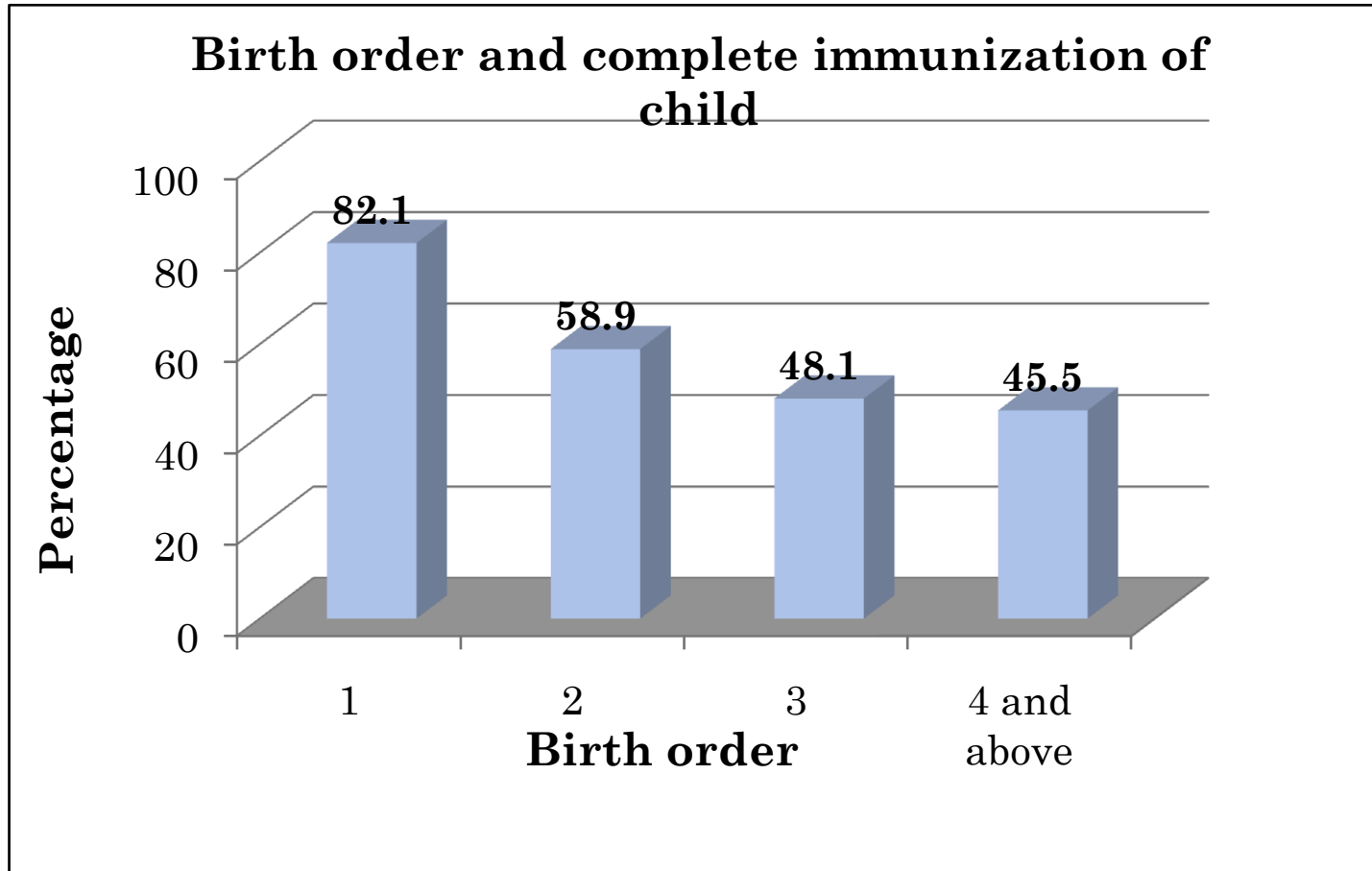
4.3 PLACE OF BIRTH AND IMMUNIZATION STATUS OF CHILD



(Note-Home delivery n=18, Institutional delivery n=132)



4.5 BIRTH ORDER AND COMPLETE IMMUNIZATION OF CHILD



As shown in fig there was decrease in percentage of complete immunization with increasing birth order of child.



CONCLUSION

- This study included total 150 mothers from both slum and non-slums of urban area of Surendranagar district.
- Total 97 children (64.7%) received complete immunization. while 5.3 percent were not immunised with single vaccine.
- Immunization coverage was lesser in slums (57%) than that of non slums (70%)
- Dropout rate from BCG to DPT3 vaccine was 20.78, and from BCG to measles was 19.6 percent.



- Major reasons identified for partially immunised and un-immunised children are parents preoccupied with work, fear about post vaccination complication, restriction from family members, mothers not getting properly informed by ASHA /FHW.
- Children whose mother having poor knowledge about immunization were less likely got complete immunization
- Mother education has positive relation with immunization
- Children who were delivered in institution were more likely completed their all vaccination.
- Birth order was negative in association with complete immunization of child.



RECOMMENDATION

- Community mobilization through
 - IEC –Nukkad-natak, Miking, wall Painting
 - House to house visit by frontline worker and proper counselling of mother as well as Decision Maker of family.
 - Active community participation through involving Mahila Arogya Samiti, Community leader, self help group, other community group.
- Capacity building of frontline worker
 - Training of frontline worker for proper counselling.
 - Training of FHW about using correct techniques of vaccination to avoid post immunization complications



- Immunization services
 - Mapping of urban area
 - Identification of high risk area (construction site, Railway line side slums) or area with poor immunization coverage.
 - Special Micro-planning of immunization for these high risk area.
 - Special planning of fixed day immunization days.
 - Identification target beneficiary (0 to 60 months children) and monitoring immunization status of these children through house to house search.
 - Name based tracking of drop out children through E-mamata.
 - Supportive supervision & Monitoring through UHO & THO



THANK YOU

