

## A Cross Sectional Study of Immunization Status Among Beneficiaries of Anganwadies of Rural Field Practice Area of AIMS & RC, Rajsamand

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### Abstract

The current scenario depicts that immunization coverage has been steadily increasing but the average level remains far less than the desired. Though there is increased accessibility of health care services in rural areas, its utilization is low. Hence the present study is undertaken in an attempt to assess immunization status of children enrolled in anganwadi centers. Each Anganwadi centre was considered as a single cluster and all children from the selected anganwadi centers were included in the study. Data was analyzed. The major cause of incomplete immunization was postponement of immunization due to inter current illness of the child. There is only marginal difference in immunization coverage according to gender, education of parents. Regular health education sessions, and regular reminders and removal of misconceptions prevailing among people will solve the problems of non-immunization.

**Keywords:** non immunization, anganwadi

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### Introduction

Vaccine preventable diseases are widespread and a major cause of childhood morbidity, mortality and life-long physical disability. Immunization has been one of the most significant and cost-effective public-health interventions to decrease childhood morbidity and mortality[1]. Universal Immunization Programme was started in India in 1985 with the aim to achieve 100% coverage of pregnant woman with 2 doses of tetanus toxoid (or a booster dose) and at least 85% coverage of infants with 3 doses each of DPT, OPV; one dose of BCG and one dose of measles by 1990.

#### Aims & objectives

- To assess immunization status among beneficiaries of anganwadies.
- To identify the reasons for partial/ non immunization among them.
- To know the impact of sex, cast, mother's education on the immunization status of the registered children of anganwadi[2-4].

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### Methodology

- Study design: Cross sectional study
- Study area: Anganwadies of field practice area of AIMS & RC, Rajsamand
- Study method & sample: Registered beneficiaries of anganwadies were included in study[5-7].

5 anganwadies were randomly selected. 206 children (registered children of anganwadi >1 year of age), 19 antenatal women and 56 adolescent girls (registered adolescent girls >16 years of age) were included in study.

Children, their mothers and other beneficiaries were asked to remain present on the anganwadi Centre on the days of our visit and information was collected from them & from anganwadi registers in pre designed proforma.

**Data analysis:** Data was entered in MS Excel and analyzed by using simple proportions and chi-square test[8,9].

### Results & observations

**Children:** Of the 206 children, 180(87.38%) were found fully immunized & 26(12.62%) were found partially immunized. None of them were found non-immunized. Coverage for individual vaccines were found as – 100% for BCG; 99.02%, 96.6% and 95.14%

for OPV 1,OPV 2 and OPV 3 respectively; 98.54%,96.6% and 94.66% for DPT 1,DPT 2 and DPT 3 respectively while 89.8% for measles.The coverage of pulse polio immunization was 98.54%.

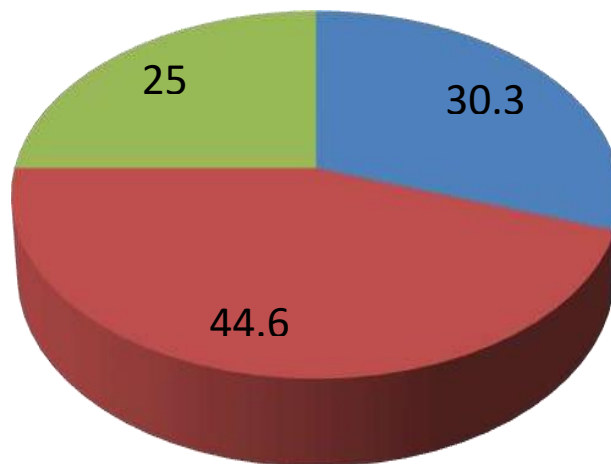
**Antenatal women:** Coverage for TT was found 100%.  
**Adolescent girls:** Only 14(25%) adolescent girls had taken complete two doses of TT.



**Fig 1:Immunisation being carried out**

**Table 1:Variables and their processing values**

Variable	Fully immunized	Partially immunized	Total	X <sup>2</sup> Value and p value
<b>Sex</b>				
Male	101(90.99%)	109(9.01%)	111(53.88%)	X <sup>2</sup> =2.109
Female	79(83.16%)	16(16.84%)	95(46.12%)	p>0.05
<b>Education of mother</b>				
≥ Primary	105(93.75%)	7(6.25%)	112(54.37%)	X <sup>2</sup> = 9.035
< Primary	75 (79.78%)	19(21.22%)	94(45.63%)	p<0.05
<b>Caste</b>				
General	57(93.44%)	4(6.66%)	61(29.61%)	
OBC	67(87.01%)	10(12.99%)	77(37.38%)	X <sup>2</sup> =3.601
SC&ST	56(82.35%)	12(17.65%)	68(33.01%)	p>0.05
<b>Total</b>	180(87.38%)	26(12.62%)	206(100%)	



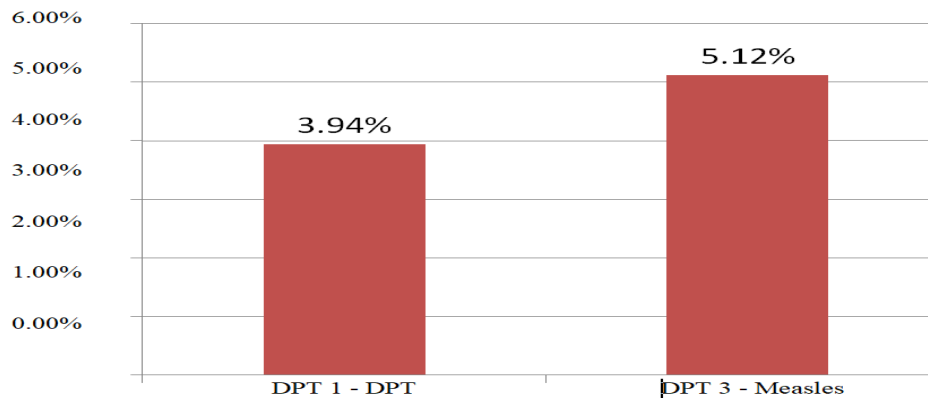
**Fig 2: Immunization status among adolescent girls**

[Blue area shows no dose of TT,Red area shows only one dose of TT,Green area shows two dose of TT]

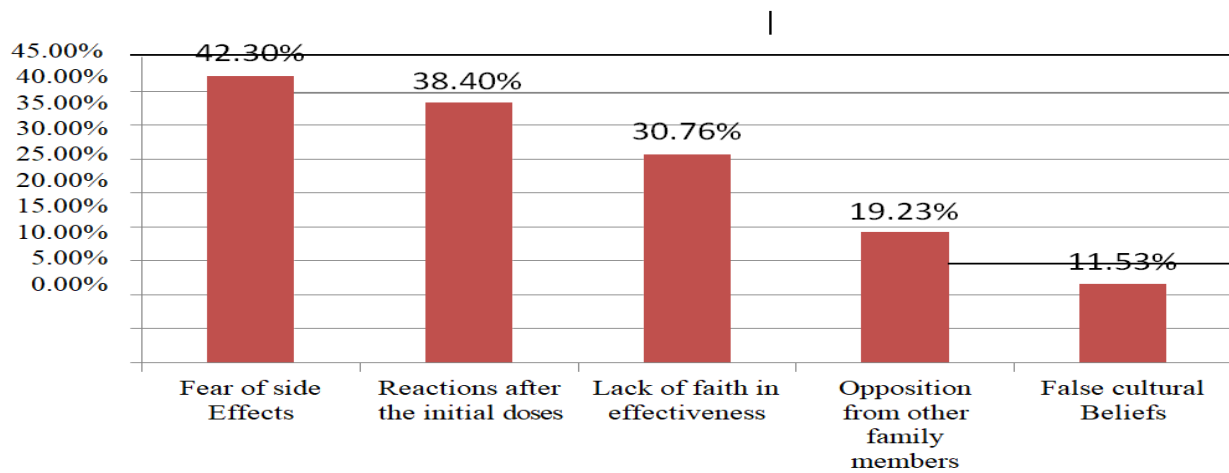
**Table 2: Association between education status and availability of immunization card**

Education status of mother	Immunization card available	Immunization card not available	Total
≥Primary	88(78.57%)	24(21.43%)	112(54.37%)
< Primary	54(57.45%)	40(42.55%)	94(45.63%)
Total	142(68.93%)	64(31.07%)	206(100%)

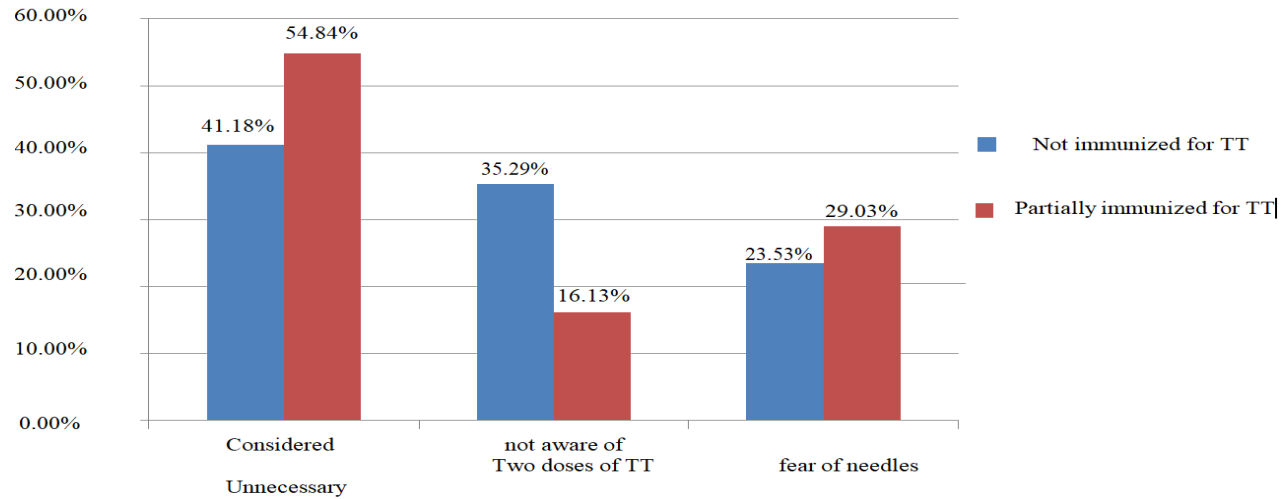
$X^2=10.649$  ;  $p<0.05$



**Fig 3: Drop-out rate among children**



**Fig 4: Reasons for partial immunization among children**



**Fig 5: Reasons for Partial/Non- immunization among adolescents**

### Conclusion

- From the present study it is concluded that ICDS has played very successful role in increasing the immunization status of antenatal women and children.
- Immunization for Tetanus Toxoid among the adolescent girls was found low, so the need of an hour is to raise awareness among them.
- Timely health education should be provided to the mothers regarding the importance, schedule, common side effects and efficacy of the vaccines.
- Minor reactions following the injectable vaccines should be minimized.
- Interest should be developed both in local health functionaries and adolescent beneficiaries to accelerate the optimization of immunization among the adolescent girls.

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