# "A Study To Assess The Knowledge Regarding Revised Immunization Schedule Among Mothers Of Under Five Children At Pediatric Out Patient Department In Spmc "Svims Hospital Tirupati".

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# Abstract

**Introduction :** vaccines are immuno - biological substances which produce specific protection against a given disease. It stimulates active production of protective antibody and other immune mechanisms.aim:to assess the knowledge and practice regarding revised immunization schedule among mothers of under five children..

*Materials and methods: :* the research approach used for the study is non- experimental descriptive research design. The sample of the study is taken by non probabilityconvenient sampling technique with 100 selected mothers of under-five children at svims pediatric opd, tirupati. The data collection done in the period of 27/07/2022 to 01/08/2022. A self structured questionnaire was used to collect the data consist of

**Part a** : this consists of 20 multiple choice questions related to assess the knowledge of mothers regarding revised immunization schedule.

**Part b**: this consists of 10 multiple choice questions to assess the knowledge on practices of mothers on selected immunization practices. The data analyzed statistically. Mainly chi-square was used for data analysis. **Result:** the major findings of the study was in out of 100 mothers of underfive children on knowledge (40%)

**Results:** the major findings of the study was in out of 100 mothers of underfive children on knowledge49 (49%) had inadequate knowledge, 26 (26%) had moderately adequate knowledge, 25(25%) had adequate knowledge regarding revised immunization schedule.out of 100 under five mothers 67 (67%) had inadequate knowledge on pratices, 14(14%) had moderately adequate knowledge on practices, 19(19%) had adequate knowledge on practices regarding immunization.study found there is statistically significant association with socio-demographic variables and level of knowledge among mothers of under five were age, mother occupation, residence ,previous vaccination significant at p<0.01. There is statistically association with socio demographic variables and level of knowledge on practices , among mothers of under five were religion, mother education significant at p<0.05.the present study found that there is statistically significant at p<0.01. There is statistically association with socio demographic variables and level of knowledge on practices , among mothers of under five were father education significant at p<0.01. There is statistically significant at p<0.05.the present study found that there is statistically significant association with socio-demographic variables and level of knowledge on practices among mothers of under five were father education significant at p<0.01. There is statistically significant at p<0.02. There is statistically significant association with socio-demographic variables and level of knowledge on practices among mothers of under five were father education significant at p<0.01. There is statistically significant at p<0.02. There is statistically significant association with socio-demographic variables and level of knowledge on practices among mothers of under five were father education significant at p<0.03. There is statistically significant at p<0.04. There is statistically significant at p<0.05. mean sd of knowledge scores were  $8.14 \pm 3.84$  and mean sd of knowledge on

**Conclusion: the present study** concludes that mothers have inadequate knowledge and knowledge on practices regarding revised immunization schedule among mothers of under five children.hence there is need to improve the knowledge regardingrevised immunization schedule.

Keywords: knowledge, mothers of underfive, immunization schedule, pediatric opd

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## I. Introduction

Vaccines are sensitive biological substances and can lose potency if it is exposed to improper temperature during its transport and storage. In order to maintain their potency, all vaccines must be continuously stored at appropriate temperature range from the time they are manufactured until the moment of their use. Once the potency of vaccine is lost, it cannot be regained or restored.Immunization is very essential part of children health .immunization programme is a key step for the preventive services of children. The filed of pediatric immunization is growing and changing as new vaccines are becoming available and previous diseases are eradicating due to the complicity and evolution of vaccine preventable diseases. The goal of

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immunization is to protect the population from disease and decrease the incidence of disease and disease transmission

## **Objectives Of The Study**

- To assess the knowledge on revised immunization schedule among mothers of under five children.
- To assess the knowledge on practices regarding revised immunization schedule among mothers of under five children.
- To determine the association between knowledge and knowledge on practices with selected demographic variables among mothers of under five children.
- To provide information booklet on revised immunization schedule.

# II. Materials And Methods:

Research approach: non experimental approach was adopted to achieve the objectives of the study

**Research design:** the research design selected for the present study was descriptive design to achieve the objectives of the study.

## Setting of the study

The study was conducted at spmc, svims hospital at tirupathi.tirupati.

## Population

Target population : the population of the study comprised of mothers of underfive children.

Sampling technique: non probability convenientsampling technique was adopted

Sample size: Hundred under five mothers were selected.

## Criteria for sample selection:

## Inclusive Criteria:

- Mothers of under five children who are willing to participate in the study.
- Mothers of under five children who are available at the time of data collection.
- Mothers of under five children who can able to understand and speak telugu or English.

## Exclusive criteria:

• Mothers of under five children those who are suffering with psychiatric problems, Mothers of under five children those who are suffering with chronic illness

## **Development And Description Tool**

• Structured interviewed questionnaire was developed regarding revised immunization schedule amongmothers of under five children under the guidance of experts. The tool was organized under the following headings. The structured interview schedule consists of

Section I : This consists of socio –demographic data such as age of under- five mother ,religion, education of the mother and father ,occupation of the mother ,father ,type of house and family, place of residence ,family income per month ,number of under five children in the family, any vaccination reactions previously and child admission in hospital and source of information regarding revised immunization schedule.

Section II: This section consists of 2 parts .

- **Part A** : This consists of 20 multiple choice questions related to assess the knowledge of mothers regarding revised immunization schedule.
- **Part B** : This consists of 10 multiple choice questions to assess the knowledge on practices of mothers on selected immunization practices.

## Score Interpretation:

Scoring key was prepared for section -I by coding the socio -demographic data

In section II ,part A and part B each correct answer has a score of zero .thus a maximum score of 20 were allotted to knowledge of mothers on revised immunization schedule and score of 10 were allotted to

knowledge on practices of mothers on selected immunization practices. The scores were interpreted in the following manner.

Level of knowledge	Score
< 50% inadequate	1-5
51-75% moderate	6-10
>76% adequate	11-15

## Pilot Study

The pilot study was conducted from 27/07/2022 to 01/08/2022 with the sample size of 10 under five mothers in SPMC ,SVIMS ,Tirupati. After pilot study ,relevant changes were made with the guidance of experts.Reliability of the tool on knowledge was 0.82. After pilot study the relevant changes were made with guidance of experts

## **Data Collection:**

Data was collected at SPMC, SVIMS, Tirupati. A sample size of 100 under five mothers was selected by convenient sampling technique.Data was collected from 100 mothers through interview by the investigator in paediatric outpatient department, after obtaining an oral consent from the respondents five to six mothers were interviewed each day as per the mothers convenience. The time taken for interviewing each subject was 20 minutes.

Responses were recorded simultaneously during interview from 03/08/2022 to 27 /8/2022. The mothers were co-operative and attentive during data collection.

> mothers (Primi) were interviewed.

# **Statistical Analysis**

## **Descriptive statistics**

Frequency, Percentage and Mean, Standard Deviation were used for analyzing the demographic variables and knowledge scores and knowledge on practice scores

## **Inferential statistics**

Chi-Square Test, Paired t-Test, Standard Error were analyzing the association Between Knowledge and knowledge On practice regarding revised immunization scheduleamong mothers of underfiveWith Demographic Variables

**ETHICAL CONSIDERATION**: A Formal written permission was obtained from the HOD Of pediatric department at SPMC, SVIMS, Tirupati.to conduct the study and written consent was taken from the mothers of underfive children

# III. Results

**TABLE-2** Frequency and percentage distribution of demographic variables among mothers of under five

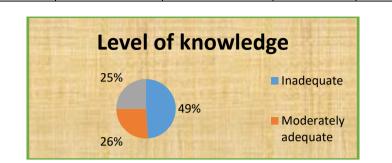
	children	(n = 100)				
S.NO	SOCIO- DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE DISTRIBUTION			
1.	AGE IN YEARS					
	a) 16 to 24 yrs	22	22 %			
	b) 25 to 30 yrs	55	55%			
	c) 31 to 35 yrs	20	20%			
	d) 36 and above	3	3%			
	TOTAL	100	100			
2.	RELIGION					
	a) Hindu	67	67%			
	b) Christian	19	19%			
	c) Muslim	14	14%			
	Others	0	0%			
	TOTAL	100	100			
3.	MOTHER EDUCATION					
	a) No formal education	10	10 %			
	b) Primary education	25	25%			
	c) Secondary education	29	29 %			
	d) College and above	36	36%			
	TOTAL	100	100			
4.	FATHER EDUCATION					
	a) No formal education	15	15%			

	b) Primary education	26	26%
	c) Secondary education	16	16%
	d) College and above	43	43%
	TOTAL	100	100
5.	MOTHER OCCUPATION		
	a) home maker	54	54 %
	b) Labourer	15	15%
	c) Employee	29	29%
	d) Other (if specify)	2	2%
	TOTAL	100	100
6.	FATHER OCCUPATION	100	200
0.	a) home maker	17	17%
	b) Labourer	37	37%
	c) Employee	42	42%
	d) Other (if specify)	4	4%
	TOTAL	100	100
7.	TYPE OF HOUSE	100	100
7.	a) Kutcha house	19	19%
	b) Pucca house	47	47%
	,		
	c) Apartment	32	<u>32%</u> 2%
	d) Any other (if specify) TOTAL	—	
0	TYPE OF FAMILY	100	100
8.		14	14.0/
	a) Single parent family	14	14 %
	b) nuclear family	48	48%
	c) Joint family	37	37%
	d) Extended family	1	1%
0	TOTAL	100	100
9.	RESIDENCE	17	
	a) Urban	47	47 %
	b) Semi –urban	11	11%
	c) Rural	42	42%
	d)Slum	0	0%
	TOTAL	100	100
10.	INCOME		
	a) Rs 5000 to Rs 10,000 /-	28	28%
	b) Rs 10,001 to Rs 15,000/-	34	34%
	c) Rs 15001 to Rs 20,000/-	19	19%
	d)Rs 20,001 and above	19	19%
	TOTAL	100	100
11.	NUMBER OF CHILDREN		
	a) One	36	36%
	b) Two	50	50%
	c) Three	10	10%
	d) Four and above	4	4%
	TOTAL	100	100
12.	ANY PREVIOUS VACCINATION REACTIONS		
	a) Yes	24	24%
	b) No	76	76%
	TOTAL	100	100
13.	NUMBER OF TIMES ADMITTED IN		
13.	NUMBER OF TIMES ADMITTED IN HOSPITAL		
13.	a) Never	52	52%
13.	HOSPITAL	52 33	52% 33%
13.	a) Never		
13.	HOSPITAL a) Never b) Once	33	33%
13.	HOSPITALa) Neverb) Oncec) Twiced) Three and above	33 12	33% 12%
13.	HOSPITAL a) Never b) Once c) Twice d) Three and above TOTAL	33 12 3	33% 12% 3%
13.	HOSPITAL a) Never b) Once c) Twice d) Three and above TOTAL SOURCE OF INFORMATION	33 12 3 100	33% 12% 3% 100
	HOSPITALa) Neverb) Oncec) Twiced) Three and aboveTOTALSOURCE OF INFORMATIONa) Family members	33 12 3 100 6	33% 12% 3% 100 6 %
	HOSPITAL a) Never b) Once c) Twice d) Three and above TOTAL SOURCE OF INFORMATION a) Family members b) Friends, neighbours	33 12 3 100 6 12	33% 12% 3% 100 6 % 12%
	HOSPITALa) Neverb) Oncec) Twiced) Three and aboveTOTALSOURCE OF INFORMATIONa) Family members	33 12 3 100 6	33% 12% 3% 100 6 %

Table – 3 Frequency and percentage distribution of knowledge among mothers of under five children

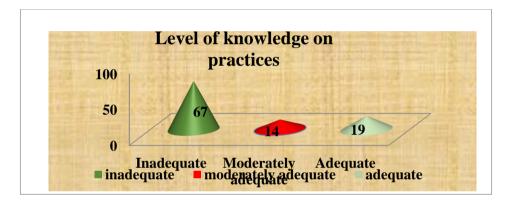
Level of Knowledge	Frequency (f)	Frequency Percentage (f) (%)		Standard Deviation	
Inadequate	49	49	0.14	2.94	
Moderately adequate	26	26	8.14	3.84	

Adequate	25	25	
TOTAL	100	100	



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<b>Table •4</b> Frequency an	d percentage distribution of	practice among mothers	of under five children
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Level of practice	Frequency (f)	Percentage (%)	Mean	Standard Deviation
Inadequate	67	67		
Moderately adequate	14	14	6.75	3.64
Adequate	19	19		
TOTAL	100	100		



<b>Table :5</b> Association of socio demographic variables with level of knowledge regarding the revised
immunization among mothers of under five children(n =100)

S. No	Demographic Variables		LEVEL OF KNOWLEDGE					
		Inad	Inadequate		Moderate		equate	Chi-Square
1	Age in years							
	a) 16 to 24 yrs.	12	24	6	23	4	32	
	b) 25 to 30 yrs.	32	65	12	46	11	44	$\chi 2 = 9.9^{**}$ P = 0.012
	c) 31 to 35 yrs.	4	8	7	27	9	36	df = 6
	d) 36 and above	1	2	1	4	1	4	ui =0
2	RELIGION							
	a) Hindu	28	57	16	62	23	92	$\chi 2 = 11.4*$
	b) Christian	14	29	5	19	0	0	$\chi^2 = 11.4$ P = 0.02
	c) Muslim	7	14	5	19	2	8	df = 4
	Others	0	0	0	0	0	0	ui – i
3	MOTHER EDUCATION							
	a) No formal education	7	14	2	8	1	4	
	b) Primary education	11	22	7	27	7	28	$\chi 2 = 10.76*$
	c) Secondary education	18	36	9	35	2	8	P = 0.02
	d) College and above	13	26	8	31	15	60	df =4
4	FATHER EDUCATION							
	a) No formal education	7	14	1	4	7	28	
	b) Primary education	14	28	8	31	4	16	
	c) Secondary education	8	16	7	27	1	4	$\chi 2 = 13.9$ P = 0.08
	d) College and above	20	40	10	38	13	52	df =8
5	MOTHER OCCUPATION							1
	a) home maker	32	64	13	50	9	36	χ2 =18.44**
	b) Labourer	9	18	5	19	1	4	P = 0.001

	c) Employee	8	16	6	23	15	60	df =4
	d) Other (if specify)	0	0	2	8	0	0	
6	FATHER OCCUPATION							
	a) home maker	8	16	7	27	2	8	
	b) Labourer	18	36	9	35	10	40	$\chi 2 = 8.56$ P = 0.38
	c) Employee	21	42	8	31	13	52	P = 0.38 df = 8
	d) Other (if specify)	2	4	2	7	0	0	ui c
7	TYPE OF HOUSE							
	a) Kutcha house	9	18	2	8	8	32	
	b) Pucca house	20	40	16	62	11	44	$\chi 2 = 6.45$
	c) Apartment	18	36	8	31	6	24	P = 0.16 df =4
	d) Any other (if specify)	2	4	0	0	0	0	
8	TYPE OF FAMILY							
	a) Single parent family	7	14	0	0	7	28	
	b) nuclear family	24	48	15	58	9	36	$\chi^2 = 12.34$
	c) Joint family	17	34	11	42	9	36	P =0.13 df =8
	d) Extended family	1	2	0	0	0	0	ui =0
9	RESIDENCE							
	a) Urban	15	30	13	50	19	76	
	b) Semi –urban	7	14	1	4	3	12	$\chi^2 = 16.5^{**}$
	c) Rural	27	54	12	46	3	12	P = 0.002 df =4
	Slum	0	0	0	0	0	0	ui – 1
10	INCOME							
	Rs 5000 to Rs 10,000 /-	12	24	7	27	9	36	
	b) Rs 10,001 to Rs 15,000/-	16	32	11	42	7	28	$\chi^2 = 5.82$
	c) Rs 15001 to Rs 20,000	9	18	3	12	7	28	P = 0.44 $df = 6$
	d)Rs 20,001 and above	12	24	5	19	2	8	ui =0
11	NO. OF CHILDREN							
	a) One	19	38	6	23	11	44	
	b) Two	23	46	14	54	13	52	
	c) Three	7	14	3	12	0	0	$\chi 2 = 6.4$ P = 0.37
	d) Four and above	0	0	3	12	1	4	df =6
12	PREVIOUS VACCINATION			-			-	χ2 =12.5**
	a) Yes	11	22	12	46	1	4	$\chi^2 = 12.3$ · · · P = 0.001
	b) No	38	76	14	54	24	96	df =2
13	ADMISSION IN HOSPITAL				-			
	a) Never	24	48	11	42	17	68	
	b) Once	17	34	8	31	8	32	$\chi^2 = 1.78$
	c) Twice	7	14	5	19	0	0	P = 0.4 df =2
	d) Three and above	1	2	2	8	0	0	ui –2
`14	SOURCE OF INFORMATION	-			~	-		
	a) Family members	4	8	2	8	0	0	1
	b) Friends, neighbours	8	16	4	15	0	0	$\chi 2 = 7.34$
	c) Health personnel like doctors and nurses	37	74	20	77	25	100	P = 0.11

\*Significant at 0.05 level, \*\* significant at 0.01 level NS-not significant

**Table :6** Association of socio demographic variables with level of knowledge on practices regarding the revisedimmunization among mothers of under five children(n = 100)

S.	Demographic Variables	(n = 100) Variables LEVEL OF PRACTICES						
No		Inadeo	Inadequate Moderate Adequate					Chi-Square
1	AGE IN YEARS							
	a) 16 to 24 yrs.	16	24	3	21	3	15	$\chi 2 = 6.23$
	b) 25 to 30 yrs.	37	55	9	63	9	45	P = 0.39

	c) 31 to 35 yrs.	12	18	1	7	7	35	df =6
	d) 36 and above	2	3	1	7	0	0	
2	RELIGION							
	a) Hindu	44	66	9	63	14	70	$\chi 2 = 1.6$
	b) Christian	12	36	3	21	4	20	P = 0.8
	c) Muslim	11	16	2	14	1	5	df =4
	Others	0	0	0	0	0	0	
3	MOTHER EDUCATION							
	a) No formal education	7	10	1	7	2	10	$\chi 2 = 5.03$
	b) Primary education	15	22	3	21	7	35	P = 0.28
	c) Secondary education	22	33	2	14	5	25	df =4
	d) College and above	23	34	8	56	5	25	
5	FATHER EDUCATION							
	a) No formal education	9	13	1	7	5	25	
	b) Primary education	18	27	1	7	7	35	$\chi 2 = 11.1 **$
	c) Secondary education	10	15	4	28	2	10	$\tilde{P} = 0.0004$
	d) College and above	30	45	8	56	5	25	df =8
6	MOTHER OCCUPATION							
	a) home maker	39	58	3	21	12	60	
	b) Labourer	11	16	1	7	3	15	$\chi^2 = 7.8$
	c) Employee	17	25	8	56	4	20	P = 0.6
	d) Other ( if specify)	0	0	2	14	0	0	df =6
7	FATHER OCCUPATION							
	a) Home maker	11	16	2	14	4	20	1 _
	b) Labourer	27	40	4	28	6	30	$\chi 2 = 3.6$
	c) Employee	27	40	7	49	8	40	P = 0.88
	d) Other (if specify)	2	3	1	7	1	5	df =8
8	TYPE OF HOUSE	2	5	- 1	,	1	5	
Ŭ	a) Kutcha house	13	19	1	7	5	25	$\chi 2 = 4.67$
	b) Pucca house	28	42	8	56	11	55	P = 0.32
	c) Apartment	20	36	5	35	3	15	df = 4
	d) Any other (if specify)	24	3	0	0	0	0	ui – i
9	TYPE OF FAMILY	2	5	0	0	0	0	
	a) Single parent family	10	15	2	14	2	10	
	b) Nuclear family	30	45	10	70	8	40	
	c) Joint family	27	40	10	7	9	45	$\chi 2 = 15.24^*$
	c) joint family					0	45	P = 0.05
	d) Extended family	0	0	1	7	0	0	df = 8
10	RESIDENCE							un o
	a) Urban	32	48	8	56	7	35	
	b) Semi –urban	7	10	1	7	3	15	$\chi 2 = 1.59$
	c) Rural	28	42	5	35	9	45	P = 0.8
	Slum	0	0	0	0	0	0	df =4
11	INCOME	Ŭ	Ŭ	0	Ŭ	Ŭ	Ŭ	
	Rs 5000 to Rs 10.000 /-	20	20	2	14	6	30	χ2 =5.14
<b>├</b> ──┤	b) Rs 10,001 to Rs 15,000/-	23	34	6	42	5	25	P = 0.52
<b>├</b> ──┤	c) Rs 15001 to Rs 15,000	11	16	2	14	6	30	df = 6
	d)Rs 20,001 and above	11	10	4	28	2	10	ur =0
12	NO. OF CHILDREN	1.5	1)	7	20	-	10	
12	a) One	23	34	8	56	5	25	
	b) Two	35	52	6	42	9	45	$\chi 2 = 7.42$
	c) Three	6	9	0	0	4	20	P = 0.28
	d) Four and above	3	5	0	0	4	5	df =6
13	PREVIOUS VACCINATION	5	5	0	0	1	5	
15			- a :			4	20	$\chi 2 = 0.25$
	a) <sub>Yes</sub>	16	24	4	28	_	20	P = 0.88
	b) No	51	76	10	70	15	75	df = 2
14	ADMISSION IN HOSPITAL							
	a) Never	33	49	10	70	9	45	1
	b) Once	26	39	10	70	6	30	$\chi 2 = 1.19^*$
	,				-			P = 0.05
	c) Twice	8	12	0	0 21	4	20	df =2
15	d) Three and above	0	0	3	21	0	0	
15	SOURCE OF INFORMATION	5	7	0	0	1	5	
	a) Family members	5	7	0	0	1	5	$w^2 = 1.02$
	b) Friends, neighbours	8	12	1	7	3	15	$\chi 2 = 1.83$ $P = 4$
	c) Health personnel like doctors and	54	81	13	93	15	75	P = 4 df =0.76
	nurses d)Media like TV, radio, newspaper etc	0	0	0	0	0	0	ui -0.70
	unvieula like I v. radio, newspaper etc	0	0	0	0	0	0	1

# IV. Discussion

Immunizations today saves more than three million lives a year. However millions of children still do not have access to basic immunization and die from diseases that can be prevented by available vaccines.

The first objective of the study is to assess the knowledge regarding revised immunization schedule among mothers of under five children. out of 100 under five mothers ,49 (49%) had inadequate knowledge,26 (26%) had moderately adequate knowledge, 25(25%) had adequate knowledge regarding revised immunization schedule.

In (2016) Vinish V was conducted a descriptive method with survey approach to assess the mothers knowledge on immunization schedule. Mothers who brought their children for immunization were the samples. Structured knowledge questionnaire was used for collecting the data from 50 samples that were selected by purposive sampling technique. Split half method was used to test reliability of structured knowledge questionnaire and the value was r = 0.82. The findings of the study showed that most of the samples were getting information about immunization from the Anganwadi workers. On assessment, it was found that 38 (76%) of the subjects had poor knowledge, 10 (20%) have average knowledge and 02(4%) have good knowledge about the topic. As per the chi-square, value researcher concluded that there is no significant association with the participants' existing knowledge and the selected demographic characteristics. This study concluded that majority of the mothers were blindly taking their children to vaccination centres without having any idea about vaccines and vaccination schedule. So there should be compulsory provision for health education sessions for mothers with main emphasis on importance of vaccination. Due to low awareness, many mothers were missing the vaccine due dates of their children. Two good sources for passing health education messages to mothers were Anganwadi workers and television.

The second objective of the study is to assess the knowledge on practices regarding revised immunization schedule among mothers of under five children. Out of 100 under five mothers 67 (67%) had inadequate knowledge on practices, 14(14%) had moderately adequate knowledge on practices, 19(19%) had adequate knowledge on practices regarding immunization.

In (**2016**) **Vasantha kalyani** C et al conducted a cross sectional design to assess the knowledge, attitude and practice of mothers of under five children regarding immunization and 50 mothers of under five children who attended the PHC in rishikesh were selected, these samples was selected by using convenient sampling technique. The findings of the study shows that 25 (50%) had moderately adequate knowledge where as 16 (32%) showed adequate knowledge and 9(18%) had inadequate knowledge regarding immunization regarding subjects attitude 45(84%) mothers felt vaccination is important while 5(16%) of them did not realise the importance and 44(88%) had poor practice where as 6(12%) demonstrated good practice about children's immunization. There was significant association found between knowledge and attitude of the study subjects with the p valve 0.006 . The study had concluded that there is a need to increase awareness and knowledge about the importance of vaccination ,a planned educational programme is needed to improve awareness in mothers.

The third objective of the study is to determine the association between levels of knowledge regarding revised immunization schedule among mothers of under five children with selected socio-demographic variables. The present study found there is statistically significant association with socio-demographic variables and level of knowledge among mothers of under five were age, mother occupation, residence ,previous vaccination significant at p<0.01. There is statistically association with socio demographic variables and level of knowledge among mothers of under five were education significant at p<0.01.

In (2017) N.Sujith Devi et al was conducted a non experimental survey research design to assess the knowledge regarding immunization among mother of under five children and a sample of 200 mothers of under five children were selected by using non probability convenient sampling technique and the study was conducted at selected area of pune city .The findings shows that average knowledge 140 (70%) and poor 50 (25%) ,good 10 (5%) among mothers .The study concluded that knowledge deficiency in the area of BCG and after care of BCG vaccination .Most of the mothers have lack of knowledge about the DPT vaccination and its importance ,doses of hepatitis B and the vitamin A vaccination.

The fourth objective of the study is to determine the association between level of knowledge on practices regarding revised immunization schedule among mothers of under five children with selected sociodemographic variables. The present study found that there is statistically significant association with sociodemographic variables and level of knowledge on practices, among mothers of under five were father education significant at p<0.01. There is statistically significant association with socio-demographic variables and level of knowledge on practices among mothers of under five children were type of family, admission in hospital, significant at p<0.05.

In (2018) Visanth V.S et al was conducted a evaluative research study to assess the knowledge and attitude of mothers of under-five children regarding immunization in selected rural areas of uttar pradesh. The 60 samples were selected by purposive sampling technique and study was conducted in mau village under mohanalalganj community health center. Chi-square test was done to find the association between the knowledge of the mothers of under five children with selected socio demographic variables. Level of knowledge directly correlated with maternal

literacy ( $p \le 0.05$ ) and to a lesser extent with fathers' literacy and advancing age was associated with better knowledge ( $p \le 0.05$ ). The results regarding knowledge showed that 19 (31.7%) had moderate knowledge, 41(68.3%) had inadequate knowledge and none had adequate knowledge. The results also concluded that 42(70%) had moderate attitude, 18(30%) had poor attitude and none had good attitude. The study concluded that there is limited knowledge among parents regarding newer vaccines.

# V. Conclusion

The descriptive study through information booklet found to be very effective in improving the knowledge among mothers who have below 5 yrs children on immunization. The knowledge regarding immunization was improved by giving the information booklet. Being as a nurses, our main responsibility is try to make our India, free from communicable disease by providing immunization for all under five children.

## Nursing Implications

Nursing is a dynamic process, which involves quality-based practice, scientific knowledge and dissemination of research knowledge in to practice. So the present study adds major implications in to various areas of nursing to help mothers who have below 5 yrs children about immunization.

## **Nursing Practice**

- ♦ WHO says nursing has wide scope in primary health area. Health care can not provided by one agency. It is up to the individual to take care. A timely enlighten bring numerical changes in health behavior
- Nurse can use the planed health education program to teach the mothers who have under 5 children to provide adequate knowledge on immunization.
- Nurse can educate the mothers who have under 5 children about important of immunization.
- Nurse can use the charts to provide further reference for mothers on immunization.
- ♦ Measures can be taken to prevent disease through mass media.

## **Nursing Education**

- Nurse educators should encourage the nursing students to conduct immunization awareness programme in the community/ as well as in the hospital.
- Nurse educator should motivate the learners to identify the problems and reason for non acceptance of vaccine and find out the solution for the problem.
- The importance of immunization should be included in the nursing curriculum which is considered as the optional vaccine.

# Nursing Administration

- Nurse administrator can disseminate the research knowledge into practice, so that the under five children can be benefited.
- Nurse administrator can conduct seminar / workshop on pneumococcal vaccination for the nurses to improve the knowledge regarding pneumococcal vaccination among mothers of under five children.
- Nursing administrator motivate the community health nurse to prepare pamphlets / other A.V aids to impart knowledge regarding pneumococcal vaccination in rural area.

## Nursing Research

◆The study can be a baseline for future studies to build upon.

- ♦ Future researcher study could be done to identify the factors influencing adherence / non adherence of immunization.
- Extensive research can be conducted regarding immunization by using self instructional module.

## Recommendations

A comparative study can be done between urban mothers and rural mothers who have under 5 children.

- A similar study can be conducted with large samples.
- Study can be done using different methods of teaching.
- Future studies can be conducted on knowledge and factors influence noncompliance of optional vaccine among mothers.

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