



“A study to assess the effect of health teaching on knowledge regarding integrated management of selected childhood illness(Diarrhoea, Anaemia, & Malnutrition) among the anganwadi workers at selected areas”.

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Abstract: Childhood under nutrition is an important area of concern in India. Children with Severe Acute Malnutrition(SAM) have nine times higher risk of dying than well-nourished children. With appropriate nutritional and clinical management, many of such deaths can be prevented. evaluative research approach was used in this study. In this study used Quasi experimental one group pre test post test design. A Non-Probability Purposive sampling technique was used for this study. The sample selected for the present study comprised of anganwadi workers. The research finding recorded that the knowledge of the anganwadi workers improved remarkably after health teaching. Average knowledge score in pretest was 75% which increased to 100% in posttest. T-value for this test was 5 with 59 degrees of freedom. Corresponding p-value was small (less than 0.05), the null hypothesis was rejected. It is evident that the knowledge of the anganwadi workers improved significantly after the health teaching regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition).

Keywords: Assess ,Effect ,Health Teaching, Knowledge, Diarrhoea, Anganwadi Workers, Anaemia, Malnutrition

Introduction

Every year more than 11 million children in developing countries die before the age of 5. India has one of the highest rates of childhood mortality in the world. Most of these deaths occurring within the first month of a newborn's life and nearly half of all neonatal deaths occurring within the first week of a child's life. India has made a strong commitment to the reduction of neonatal mortality through the implementation of the joint UNICEF and WHO initiative, IMNCI. The main strategy of IMNCI is to train and provide preventive and home based care through India's primary health care system. Studies show that the integrated approach ensures that all relevant needs of the child are looked at and attended to during the contact of the child with the health workers.

In health facilities, the IMCI strategy promotes the accurate identification of childhood illnesses in outpatient settings, ensures appropriate combined treatment of all major illnesses, strengthens the counselling of caretakers, and speeds up the referral of severely ill children. In the home setting, it promotes appropriate care seeking behaviours, improved nutrition and preventative care, and the correct implementation of prescribed care. The Integrated Management of Childhood Illness (IMCI) was introduced by UNICEF and WHO as a new strategy aiming at reducing the continuing high morbidity and mortality in children under the age of five years. This integrated strategy led to the formation of "The Integrated Management of Childhood Illness (IMCI)" by UNICEF and WHO. It was based on the rationale that decline in child mortality rates is not necessarily dependent on the use of sophisticated and expensive technologies but rather on a holistic approach that combines the use of strategies that are cheap and can be made universally available and accessible all. According to the World Bank Report for situations where laboratory support and clinical resources are limited, such an approach is more realistic and cost-effective, and therefore, has the potential to make the greatest impact on the global burden of disease.²

The IMNCI guidelines are a simplified system of diagnosis and treatment that is designed for the use by health worker with limited training and little or no lab support with this endeavor the present study has been, IMNCI guidelines are a simplified system of diagnosis and treatment designed for the use by health worker with limited training. The aim and objectives of the study was to study the level of awareness about the concept of IMNCI amongst trained anganwadi workers and to assess the extent of knowledge and skills of the anganwadi workers regarding the management after the training.

Childhood under nutrition is an important area of concern in India. Children with Severe Acute Malnutrition (SAM) have nine times higher risk of dying than well-nourished children. With appropriate nutritional and clinical management, many of such deaths can be prevented. Malnutrition among children is

actually a manifestation of many other socioeconomic and cultural factors. General poverty coupled with lack of assured employment round the year is the major issue which needs to be looked into. Generally there is a tendency among the planners and administrators to look into malnutrition as a health related issue and accordingly the interventions also focus on it. The main livelihood and poverty gets missed out. All this necessitate that the problem is dealt with in a more comprehensive and multidisciplinary approach.

Research Approach: In this study used evaluative research approach.

Research designed: In this study used Quasi experimental one group pre test post test design **Setting :** Researches setting in this study were the s selected childhood illness(Diarrhea, Anemia, & Malnutrition) among the anganwadi workers at selected areas.

Sample: The sample selected for the present study comprised of anganwadi workers

Sample size : 60

Sampling technique: A Non-Probability Purposive sampling technique was used for this study.

Inclusion Criteria:

- The sample those who are willing to participate in the study
- The sample those who are available during the data collection period
- The sample those who are understand Marathi to read & write

Exclusion Criteria:

- The sample those who are not willing to participate
- Anganwadi workers those who are not present at the time of data collection

Procedure Of Data Collection:

Data collection commenced after the prior permission taken from the child development officer. A formal permission was obtained from authorities of the selected hospitals

Formal administrative approval was sought from the Nagar Savak of Phule nagar,Nagar Savak of Balaji Nager and head of PSM department, Consent was taken from anganwadi workers.

The following schedule was followed for data collection:

The investigator approached the selected anganwadi workers.

The data collection was done among selected samples of anganwadi workers.

A structured knowledge questionnaire schedule for baseline data was used for data collection. The investigator conducted pre-test , then provide health teaching on IMNCI and then on the 7th day post-test has been done to assess the effect of health teaching on knowledge regarding integrated management of selected childhood illness (Diarrhoea, Anaemia, & Malnutrition) among the anganwadi workers . The duration of the data collection for each sample was 25 to 30 minutes. The pre test done on 21st January 2021 and post test 29 January 2021.

ANALYSIS AND INTERPRETATION OF DATA

The data was analyzed according to objectives of study, which were:

1. To assess the existing knowledge level regarding integrated management of selected childhood illness (Diarrhoea, Anaemia, & Malnutrition) among the anganwadi workers at selected areas.
2. To evaluate the effectiveness of health teaching regarding integrated management of selected childhood illness (Diarrhoea, Anaemia, & Malnutrition) among the anganwadi workers at selected areas.
3. To find the association between knowledge score of anganwadi workers with selected demographic variable

Organization of the Data

The analysis of data is organized and presented under the following headings.

Section I : Description of samples (anganwadi workers) based on their personal characteristics

Section II : Analysis of data related to the existing knowledge level regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition) among the anganwadi workers.

Section III : Analysis of data related to the effectiveness of health teaching regarding integrated management of selected childhood illness (Diarrhoea, Anaemia, & Malnutrition) among the anganwadi workers.

Section IV : Analysis of data related to the association between knowledge score of anganwadi workers with selected demographic variable.

Section I

Description of samples (anganwadi workers) based on their personal characteristics.

Table 1: Description of samples (anganwadi workers) based on their personal characteristics in terms of frequency and percentages.

N=60

Sr.No	Demographic variable	Frequency (f)	Percentages (%)
01	Age of the participants in years		
	a) 18-30 years	32	53.3%
	b) 30-50 years	28	46.7%
02	Marital status		
	a) Married	52	86.7%
	b) Unmarried	5	8.3%
	c) Widow	0	0.0%
	d) Divorce	3	5.0%
03	Religion		
	a) Hindu	27	45.0%
	b) Muslim	10	16.7%
	c) Christian	19	31.7%
	d) Sikh	4	6.7%
04	Educational status		
	a) Primary	4	6.7%
	b) Secondary	25	41.7%
	c) Higher secondary	26	43.3%
	d) Graduate & above	5	8.3%
05	Work experience		
	a) 1-5 years	30	50.0%
	b) 5-10 years	30	50.0%
06	Duration of work		
	a) 4 hrs	0	0.0%
	b) 8 hrs	60	100.0%

Table No 1: 53.3% of the anganwadi workers had age 18-30 years and 46.7% of them had age 30-50 years.

86.7% of them were married, 8.3% of them were unmarried and 5.5% of them were divorced.

45% of them were Hindu, 16.7% of them were Muslim, 31.7% of them were Christian and 6.7% of them were Sikh.

6.7% of them had primary education, 41.7% of them had secondary education, 43.3% of them had higher secondary education and 8.3% of them had graduation and above.50% of them had 1-5 years of work experience and 50% of them had 5-10 years of work experience.

All of them work for 8 hours.

Section II:

Analysis of data related to the existing knowledge level regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition) among the anganwadi workers.

N=60

Knowledge	Pretest	
	Frequency (f)	Percentage (%)
Poor (Score 0-6)	45	75.0%
Average (Score 7-13)	5	8.3%
Good (Score 14-20)	10	16.7%

Table No 2: In pre-test, 75% of the anganwadi workers had poor knowledge (Score 0-6) and 8.3% of them had average knowledge (score 7-13) and 16.7% of them had good knowledge regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition).

Section III:

Table 3: Effectiveness of health teaching regarding integrated management of selected childhood illness (Diarrhoea, Anaemia, & Malnutrition) among the anganwadi workers

N=60

Knowledge	Pretest		Posttest	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Poor (Score 0-6)	45	75.0%	23	38.3%
Average (Score 7-13)	5	8.3%	3	5.0%
Good (Score 14-20)	10	16.7%	34	56.7%

Table No 3: In pretest, 75% of the anganwadi workers had poor knowledge (Score 0-6) and 8.3% of them had average knowledge (score 7-13) and 16.7% of them had good knowledge regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition). In posttest, 38.3% of the anganwadi workers had poor knowledge (Score 0-6), 5% of them had average knowledge (score 7-13) and 56.7% of them had good knowledge (score 14-20) regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition). This indicates that the knowledge of the anganwadi workers improved remarkably after health teaching.

Table 4: Paired t-test for the effectiveness of health teaching regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition) among the anganwadi workers

N=60

	Mean	SD	T	df	p-value
Pretest	7.0	6.1	5.0	59	0.000
Posttest	12.7	7.7			

Table No 4: Researcher applied paired t-test for the effectiveness of health teaching regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition) among the anganwadi workers. Average knowledge score in pretest was 7 which increased to 12.7 in posttest. T-value for this test was 5 with 59 degrees of freedom. Corresponding p-value was small (less than 0.05), the null hypothesis is rejected. It is evident that the knowledge of the anganwadi workers improved significantly after the health teaching regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition).

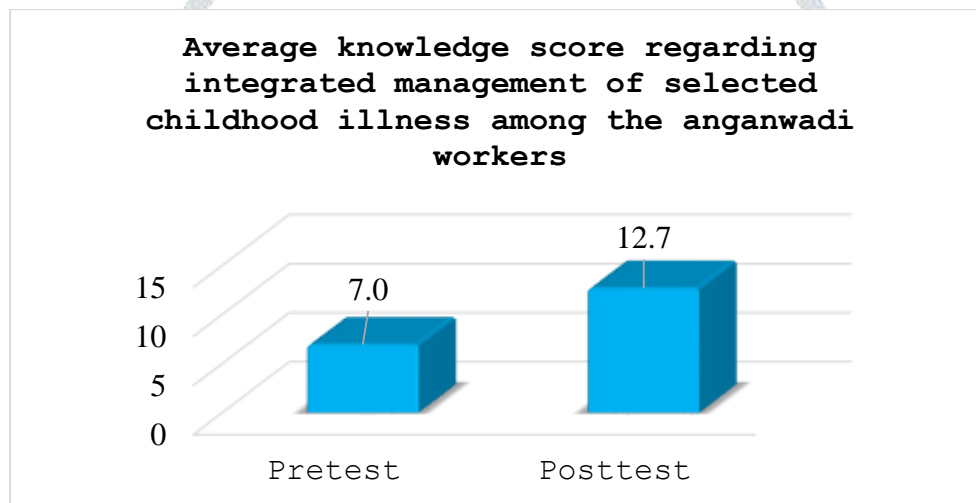


Fig No 9 : column showing Average knowledge score regarding integrated management of selected childhood illness among the anganwadi workers

Section IV:

Analysis of data related to the association between knowledge score of anganwadi workers with selected demographic variable.

Table 5: Fisher's exact test for the association between knowledge score of anganwadi workers with selected demographic variable

N=60

Sr.No	Demographic variable		Knowledge			P-value
			Average	Good	Poor	
1	Age of the participants in years	a) 18-30 years	3	6	23	0.908
		b) 30-50 years	2	4	22	
2	Marital status	a) Married	5	8	39	0.805

		b) Unmarried	0	1	4	
		c) Divorce	0	1	2	
3	Religion	a) Hindu	2	5	20	0.848
		b) Muslim	1	1	8	
		c) Christian	1	4	14	
		d) Sikh	1	0	3	
4	Educational status	a) Primary	0	0	4	0.668
		b) Secondary	3	5	17	
		c) Higher secondary	1	4	21	
		d) Graduate & above	1	1	3	
5	Work experience	a) 1-5 years	3	6	21	0.678
		b) 5-10 years	2	4	24	

Table No 5: Since all the p-values are large (greater than 0.05), none of the demographic variables was found to have significant association with the knowledge among the anganwadi workers regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition).

DISCUSSION: The findings of the study have been discussed with reference to the objectives stated in study and with findings of other studies and with the findings of the other studies

This study involved experimental one group pre test post test design, A Non Probability Purposive Sampling Technique was used for this study. The size of the sample was 60 anganwadi workers.

A similar study was conducted in Ethiopia 2019, On Assessment of Factors Affecting the Implementation of Integrated Management of Neonatal and Childhood Illness for Treatment of under Five Children by Health Professional in Health Care Facilities in Yifat Cluster in North Shewa Zone. A total of 201 health professionals will be selected using proportionally allocated to population size and interviewed using structured and pretested questionnaires. Data will be coded, entered and cleaned using SPSS version 20 for analysis. Results shows were obtained from 201 health care professionals, yielding a response rate of 100%. The overall IMNCI implementation was 58% as high level implementation and 42% as low level implementation. In multivariate analysis the implementation of IMNCI was higher among IMNCI trained health care professionals ([AOR = 2.7, 95% CI: (1.1.278, 4.562)]) and among those whose always referring chart booklet [AOR = 2.76, 95% CI: (1.753, 5.975)]. Conclusion was IMNCI strategy can be better implemented through provision of training for the health workers.

In this study, In one group ,53.3% of the anganwadi workers had age 18-30 years and 46.7% of them had age 30-50 years.

86.7% of them were married, 8.3% of them were unmarried and 5.5% of them were divorced. 45% of them were Hindu, 16.7% of them were Muslim, 31.7% of them were Christian and 6.7% of them were Sikh.

6.7% of them had primary education, 41.7% of them had secondary education, 43.3% of them had higher secondary education and 8.3% of them had graduation and above. 50% of them had 1-5 years of work experience and 50% of them had 5-10 years of work experience.

A similar study was conducted in Haryana, India to study the practice of skills learnt by basic health workers for 4 - 8 weeks and one year after IMCI training, and to identify the gaps in practices due to various constraints. The anganwadi workers (AWWs) and the supervisory staff were given 5 days IMCI training using WHO package. The performance on correct treatment of cases by AWWs weeks were trained 4-6 weeks prior to follow up was better than group followed up one year after the completion of training (81.8% and 47.9% respectively). At the same time, the performance on correct treatment showed significant improvement during the second follow up (47.9% and 83.8% respectively). Performance on counseling improved from 15.6% during 1st follow up to 52.1% during 2nd follow up visit. The average number of cases seen by AWWs increased from 6.6 in 1st follow up to 9.3 during second follow up of the same AWWs. Thus the conclusion was that basic health workers (AWWs) are capable of correct case management of sick children using the IMCI guidelines. The first follow up visit should not be delayed as delay leads to loss of skills. The health workers benefit from frequent and regular follow up by supervisors. Provision of requisite supplies is essential for practice of skills after training in IMCI by basic health worker.

SUMMARY

Association of between knowledge score of anganwadi workers with selected demographic variable was assessed using Fisher's Exact Test. The summary of Fisher's Exact Test is tabulated in this research.

After comparing between pre-test and post-test knowledge and practice score, it was proven that there was increase knowledge level about IMNCL. Average knowledge score in pretest was 7 which increased to 12.7 in posttest. T-value for this test was 5 with 59 degrees of freedom. Corresponding p-value was small (less than 0.05), the null hypothesis is rejected. It is evident that the knowledge of the anganwadi workers improved significantly after the health teaching regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition).

CONCLUSION:

The overall experience of conducting this study was satisfying one, as there was good response of cheek s & lip stimulation setting for the study. The study was a new learning experience for the investigator.

It has been observed that pretest knowledge average mean score is 75 % after health teaching program average score raised respectively. Regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition). This indicates that the knowledge of the anganwadi workers improved remarkably after health teaching. Average knowledge score in pretest was 75% which increased to 100% in

posttest. T-value for this test was 5 with 59 degrees of freedom. Corresponding p-value was small (less than 0.05), the null hypothesis is rejected. It is evident that the knowledge of the anganwadi workers improved significantly after the health teaching regarding integrated management of selected childhood illness (Diarrhea, Anemia, & Malnutrition)

Acknowledgement

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