Research Article

A STUDY TO EVALUATE THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON KNOWLEDGE REGARDING PREVENTIVE AND CURATIVE HEALTH SERVICES FOR SELECTED HEALTH PROBLEMS USING IMNCI APPROACH AMONG CARE TAKERS OF DAY CARE CENTRES IN BANGALORE

Ellina Khuraijam[1]* and Jacqulin Jeneta B.J[2]

[1]Department of Child Health Nursing, Banglaore
[2]Faran College of Nursing, Bangalore

A R T I C L E   I N F O

A B S T R A C T

IMNCI is a systemic approach to child health which focuses on the whole child. It has been developed for the management of childhood illness, in an integrated manner which is responsible for main causes of morbidity and mortality. It includes assessment, classification and management of the major problems of a sick child under 5 years of age. Caretakers of day care centres therefore require having knowledge regarding this approach as it focuses on preventive and curative aspects of heath management and therefore help in reducing under 5 morbidity and mortality rates.

INTRODUCTION

A child is a human being between the stages of birth and puberty. Children represent the future and ensuring their healthy growth and development ought to be a prime concern of all societies. Children are vulnerable to malnutrition and infectious diseases, many of which can be effectively prevented or treated.[1]An estimated 43% of children under-5 years of age in low and middle income countries are at risk of not reaching developmental potential. 5.9 million Children under the age of 5 years died in 2015.[2].Acute respiratory infections contribute to major disease associated mortality and morbidity diarrhoeal disease is the second leading cause of death in children under five years old.[3] WHO and UNICEF have addressed this challenge by developing a strategy called the Integrated Management of Childhood Illness (IMCI). The IMCI clinical guidelines target for under 5 children. The Indian version of IMCI has been renamed as IMNCI as it include the first 7 days of age in the program. This approach has been found effective to be applied upon children under five years old with health problems. Hence, the researcher is interested in conducting study based on IMNCI approach to develop better health management of under 5 children.

Objectives

- Assess the knowledge of caretakers of day-care centres regarding preventive and curative health services for selected health problems using IMNCI approach before administration of video assisted teaching.
- Assess the knowledge of caretakers of day-care centres regarding preventive and curative health services for selected health problems using IMNCI approach after administration of video assisted teaching.
- Evaluate the effectiveness of video assisted teaching regarding preventive and curative health services for selected health problems using IMNCI approach among caretakers of day-care centres by comparing the mean pre-test and post-test knowledge score.
- Find the association between the mean pre-test knowledge scores regarding preventive and curative health services for selected health problems using IMNCI approach among caretakers of day-care centres and their selected socio demographic variables.

Corresponding author: **Ellina Khuraijam**
Department of Child Health Nursing, Banglaore

REVIEW OF LITERATURE

Studies related on effectiveness on implementation of IMNCI strategy and general study on IMNCI

A cross sectional survey was conducted to evaluate pre-service training on Integrated Management of newborn and childhood illness training in Ethiopia. Data was collected using pre-tested questionnaires, focused group interviews with teachers and students, observations of students while managing sick children using IMNCI guidelines and reviews of paediatric course outlines and other teaching/learning materials.29 health professionals`training institutions were included in the survey. All students and instructors (100%) rated that IMNCI concept is very relevant or extremely relevant. The study concluded that the students overall performance in managing sick child as per IMNCI guidelines was above average.

Studies related to effectiveness of VAT

A study was conducted to evaluate the effectiveness of video assisted teaching on safety measures followed by employees working in the silica-based industry in Pondicherry, India**.** A total of 105 employees were selected from M/s ACE Glass Containers Ltd. using the convenience sampling technique. Pre-test was conducted using a self-administered questionnaire. Subsequent video-assisted teaching was conducted by the investigator after which post test was conducted. Video-assisted teaching program was found to be effective in improving the knowledge, attitude, and practice of the subjects. Periodical reorientation on safety measures are needed for all the employees as it is essential for promoting the well-being of employees working in any industry. Video-assisted teaching program was found to be effective in improving the knowledge, attitude, and practice of the subjects.

RESEARCH METHODOLOGY

Research Approach: qualitative approach

Research Design: pre experimental one group pre-test – post-test, design.

Research Variable: video assisted teaching

Demographic variables: Baseline characteristics of caretakers of day care centres such as age, gender, religion, educational status, working experience, previous knowledge on IMNCI, mode of receiving information related to IMNCI, previous knowledge on management of diarrhoea and ARI and mode of receiving information on diarrhoea and ARI management.

Setting of the study: Day care centres in selected areas of Bangalore (Mamre Play School, Kinderdale International School, Little Ville Play School, Bachpan Play School, Sofia Day care at Sofia Public School, Euro Kids, Admiral Pre-School, SarvarKidz at Bangalore.)

Sample: Care takers of day care centres who fulfill the inclusion criteria from selected day care centres of Bangalore.

Sample size: 60

Sampling technique: Purposive sampling technique

Tools: Structured questionnaires
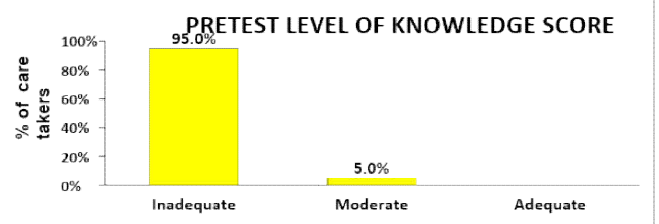
Technique: Video

RESULTS

Section I: Frequency and percentage distribution of respondents according of demographic variables.

Table 1 Demographic profile

Characteristics	Category	Respondents	
		Number (n)	Percentage (%)
Age	18 -20 years	6	10.0
	21- 30 years	27	45.0
	31 -40 years	22	36.7
	>40 years	5	8.3
Gender	Male	0	0.0
	Female	60	100.0
Religion	Hindu	25	41.7
	Muslim	5	8.3
	Chrisian	28	46.7
	Others	2	3.3
Educational status	Under graduate	39	65.0
	Graduate	21	35.0
	Post graduate	0	0.0
Working experience	<1 year	20	33.3
	1-2 years	10	16.7
	2-3 years	18	30.0
	>3 years	12	20.0
Previous knowledge on IMNC	Yes	0	0.0
	No	60	100.0
Previous knowledge on management of diarrhoea and ARI	Yes	20	33.3
	No	40	66.7
Mode of receiving information on diarrhoea & ARI management	Mass media		
	Personal reading	6	10.0
	Relative & family	3	5.0
	Health Care	36	60.0
		15	25.0

Section II: Findings related to overall and aspect wise pre-test knowledge scores of care takers regarding knowledge on IMNCI

It is observed that majority of the samples 57(95.0%) had inadequate level of knowledge and 3(5.0%) had moderate level of knowledge and none of them had adequate level of knowledge.

Figure 1 Graph Representing Distribution of Respondents on Pre-Test Knowledge Level of Knowledge on Imnci

Section III: Findings related to overall and aspect wise post-test knowledge scores of care takers regarding knowledge on IMNCI.

This shows the classification of care takers with regard to their post test knowledge level on IMNCI. It is observed that majority of the samples 47(78.3%) had adequate level of knowledge and 13(21.7%) had moderate level of knowledge. It is seen that and none of the sample were having inadequate level of knowledge on IMNCI.
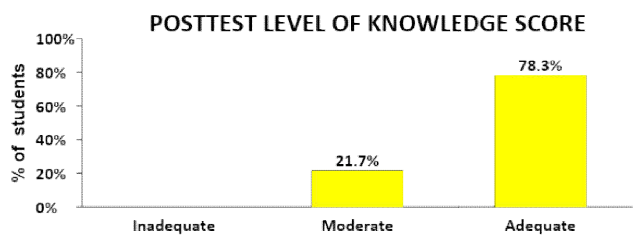
Figure 2 Graph Representing Distribution of Respondents on Post-Test Knowledge Level of Knowledge on Imnci

Section IV: Effectiveness of video assisted teaching on preventive and curative health services for selected health problems using IMNCI approach.

To evaluate the effectiveness of the video assisted teaching regarding preventive and curative health services for selected health problems using IMNCI approach among caretakers of day care centres a research hypothesis (H_1), was developed that is , there is a significant difference between pre-test and post-test level of knowledge. To test this hypothesis the level of significance was set at 0.05 level. The data depicted in the above table shows that the mean post–test knowledge scores were 31.80 and the mean pre-test knowledge score were 14.62. When a paired't' test was done, the obtained't' value 42.05 was found to be significant at 0.05 level. The obtained't' value 42.05 is found to be more than table value t (1.96 with 59df) at 0.05 level of significance. From this it is evident that there is a significant difference between the mean pre-test and post –test knowledge scores of caretakers of day care centres.
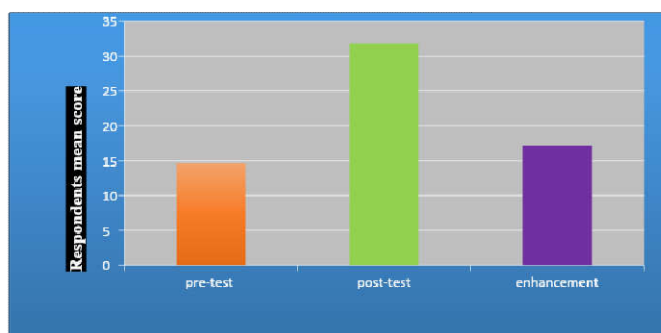

Figure 3 Graph Representing Overall Mean Score

Classification of respondents on knowledge level on preventive and curative health services for selected health problems using IMNCI approach

The data depicted shows the classification of respondents on knowledge level based on pre-test score 95.0% (57 out of 60) samples had inadequate knowledge, 5.0% (3 out of 60) samples had moderate knowledge and none of the respondents had adequate knowledge. The post test knowledge scores showed that majority of the samples 78.3% (47 out of 60) samples had adequate knowledge, followed by 21.7% (13 out of 60) samples had moderate knowledge and none of the respondents had inadequate knowledge
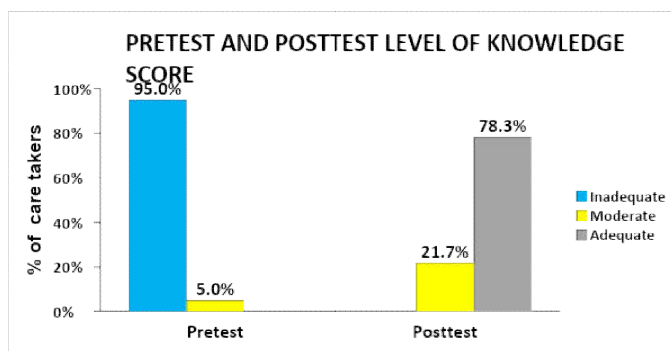

Figure 4 Claasification Of Respondents Knowledge Level On Preventive And Curative Health Services For Selected Health Problems Using Imnci Approac

Section V: This section deals with association of Pre test knowledge score of care takers regarding preventive and curative health services for selected health problems using IMNCI approach and their selected socio-demographic variables.

Table 2 Association between Demographic variables and Pre test Knowledge level of care takers regarding preventive and curative health services for selected health problems using IMNCI approach and their selected socio-demographic variables.

n=60

Demographic Variables	Category	Sample	Inadequate n	Inadequate %	Moderate n	Moderate %	χ^2 Value	P Value
Age (years)	18 -20	6	6	100.0	0	0.0	0.91 NS	P>0.05 (7.815)
	21- 30	27	25	92.6	2	7.4		
	31 -40	22	21	95.5	1	4.5		
	>40	5	5	100.0	0	0.0		
Gender	Male	0	0	0.0	0	0.0	0.00 NS	P>0.05 (3.841)
	Female	60	57	95.0	3	5.0		
Religion	Hindu	25	25	100.0	0	0.0	3.60 NS	P>0.05 (7.815)
	Muslim	5	5	100.0	0	0.0		
	Christian	28	25	89.3	3	10.7		
	Others	2	2	100.0	0	0.0		
Educational status	Under graduate	39	37	94.9	2	5.1	0.01 NS	P>0.05 (5.991)
	Graduate	21	20	95.2	1	4.8		
	Post graduate	0	0	0.0	0	0.0		
Working experience	< 1 year	20	100.0	0	0.0	0	7.36 NS	P>0.05 (7.815)
	1 -2 years	10	100.0	0	0.0	0		
	2 -3 years	18	83.3	3	16.7	0		
	> 3 years	12	100.0	0	0.0	0		
Previous knowledge on IMNCI	Yes	0	0.0%	0	0.0	0	0.00 NS	P>0.05 (3.841)
	No	60	95.0	3	5.0	0		
Previous knowledge on management of diarrhoea and ARI	Yes	20	100.0	0	0.0	0	1.57 NS	P>0.05 (3.841)
	No	40	92.5	3	7.5	0		
Mode of receiving information on diarrhoea management	Mass media	2	50.0	1	50.0	0	3.00 NS	P>0.05 (7.815)
	Personal reading	1	100.0	0	0.0	0		
	Relative and family	12	83.3	2	16.7	0		
	Health care	5	100.0	0	0.0	0		

* Significant at 5% Level,
NS : Non-significant

CONCLUSION

The study was conducted to evaluate the effectiveness of video assisted teaching on knowledge regarding preventive and curative health services for selected health problems using IMNCI approach among caretakers of day care centres in Bangalore. In the present study, 60 care takers were selected by using purposive sampling technique. The study findings

reveal that, in pre test knowledge, 95.0% had inadequate knowledge and remaining 5.0% had moderate knowledge. In post test knowledge, 21.7% had moderate knowledge and remaining 78.3% had adequate knowledge. This shows the effectiveness of the effectiveness of video assisted teaching on knowledge regarding preventive and curative health services for selected health problems using IMNCI approach. The video assisted teaching was effective in increasing the knowledge of caretakers in all the aspects of objectives. There was no significant impact between the gain in knowledge scores with selected demographic variables. The study paved the path to gain the knowledge and information among caretakers of day care centres on knowledge regarding preventive and curative health services for selected health problems using IMNCI approach.

References

1. Child-Wikipedia, the Free Encyclopaedia, (updated on 24 Feb 2017). Available from: https://www.wikipedia.org.
2. World Health Organization, WHO publications, Children mortality. Sept 2016. Available from: http://www.who.int.
3. World Health Organisation, Diarrhoeal disease, 2nd may 2017. Available from: http://www.who.int
4. UNICEF India, Integrated Management of Neonatal and Childhood Illnesses (IMNCI). Available from:http://unicef.in
5. Mohan P, Kishore B, Singh S, Bahl R, Puri A and Kumar R. Assessment of implementation of integrated management of neonatal and childhood illness in India. *Journal of Health Population and Nutrition. International Centre for Diarrhoeal Disease Research*. 12 Dec 2011. Available from: http://www.biomed search.com
6. O.P Ghai, Gupta P, Paul VK. Essential Pediatrics. 6th edition. Page 690-701
7. Gupta S. IMNCI and its recent advances with current status of trained personnel and classification of 5 preventable diseases. Health and Medicine. Oct 24 2014. Available from: http://www.slideshare.net
8. Gupta N, Jain SK, Ratnesh, Chawla U, Hossain S, Venkatesh S. An evaluation of diarrheal diseases and acute respiratory infections control programmes in a Delhi slum. Available at: https://www.ncbi.nlm.nih.gov/pubmed/17526959
9. World Health Organization, WHO publication, Global Health Observatory (GHO) data. Under-five mortality. Available from: http://www.who.int/gho
10. Selvaraj K, Chinnakali P, Majumdar A and Krishnan IS. Acute respiratory infections among under-5 children in India: A situational analysis J Nat SciBiol Med. 2014 Jan-Jun;5(1):15–20. Available from: https://www.ncbi.nlm.nih.gov
11. UNICEF Data: Monitoring the Situation of Children and Women, Feb 2017. Available from URL: https://data.unicef.org

****