DESSERTATION ON

EFFECTIVENESS OF IEC PACKAGE ON DISASTER PREPAREDNESS AMONG SELECTED SCHOOL CHILDREN AT MEDAVAKKAM, KANCHIPURAM DISTRICT.

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CERTIFICATE

This is to certify that this dissertation titled **"Effectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District"** is a bonafide work of Mrs. Sasikala. A. College of Nursing, Madras Medical College, Chennai-03, submitted to the Tamil Nadu Dr. M.G.R. Medical university, Chennai-32, in partial fulfilment of requirement for the award of Degree of Master of Science in Nursing, Branch IV, Community Health Nursing, under our guidance & supervision during the academic period from 2015 – 2017.

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ABBREVATIONS

DF	-	Degrees of freedom
SD	-	Standard Deviation
CI	-	Confidence Interval
No	-	Null Hypothesis
IEC	-	Information, Education and Communication
CRED	-	Centre for Research on the Epidemiology of Disasters
EM – DAT	-	Emergency Events Database
BIS	-	Bureau of Indian Standards
IES – R	-	Impacts of Events Scale - revised
LOT –R	-	Life Orientation Test - revised
HDI	-	Human Development Index
FA – BLS	-	First Aid – Basic Life Support
DRR	-	Disaster Risk Reduction
MANOVA	-	Multivariate Analysis of Variance
ODPEM	-	Office of Disaster Preparedness and Emergency Management
PA	-	Personal Assistant
ICS	-	Incident Command Systems
TV	-	Television
RBSK	-	Rashtriya Bal swasthya karyakram
WHO	-	World Health Organization

ABSTRACT

Statement of the problem

"E**ffectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District"**

Need for the study

India is highly disaster prone country in Asia Pacific region with average of 8 major natural calamities a year, where floods cyclones, draughts, earthquakes and epidemics are frequent from time to time. IEC package on disaster preparedness among school children is strengthening the students confident in disaster management, promoting awareness and enhancing knowledge and skills of all students associated with migration, preparedness and response measures. A child has a greater capacity to observe, learn, experiment and transfer knowledge to others. It is more prone to a new way of life and changed come to it more naturally

Objectives of the study

1) To assess the level of knowledge regarding disaster preparedness in selected school children at Medavakkam, Kanchipuram District.
2) To assess the effectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District.
3) To find out the association between the post-test level of knowledge with selected demographic variables of selected school children at Medavakkam, Kanchipuram District.

Methodology

Research approach - Quantitative research approach

Research Design –Pre-test and post test only design,

Study settings - Government Higher Secondary School at Medavakkam, Kanchipuram District.

Study Population – Selected school children

Sampling technique - Simple random sampling by lottery method.

Sample size – 60 selected school children

Data collection procedure

After getting permission from concern authorities**,** Level of knowledge was assessed by demographic profile and structured knowledge questionnaire by interview method. Concern obtained from study participants confidentiality maintained. Pre test was assessed and administration of IEC package regarding disaster preparedness. On 7^{th} day post test was conducted to assess the effectiveness of IEC package**.**

Plan for data analysis

The data were analyzed by descriptive statistics such as mean, standard deviation, frequency and percentage for demographic variables and inferential statistics like chi square test, McNemar test, student 't' test, paired 't' test and independent 't' test were used to analyze categorical variables.

Result of the study

The study reveals that the mean difference and standard deviation of the pre test and post test knowledge score (M = 4.30: 14.52, SD = 1.74, 1.90) with the 't' value of 36.44, which is statistically significant with $P \leq 0.001$. This shows the effectiveness of the IEC package on disaster preparedness among selected school children.

Recommendations

- The same study could be conducted on a large sample to generalize the results.
- The study could be replicated in different settings with similar facilities.
- Same study will be conducted in any age group.

Conclusion

The investigator thereby concluded that the IEC package on disaster preparedness among selected school children is improve the level of knowledge of to prevent and minimize the disaster impacts in future.

CHAPTER I

INTRODUCTION

"Every action in the present prepare us for the future"

- Lailah Gifty Akita.

God created the world with very intention for us to enjoy our life, without hurting the nature and surroundings. Beauty of his creation and the precious creation of His was a Human. Earth is shared by living animals plants and human beings. But man rules the whole earth and over using of the natural resources available in the earth as a result, nature is against man. It ends up with various natural calamities which results unpleasant experience over the earth, that is, flood, cyclone, hurricane, landslides, thunderstorms, earth quake, cold wave, heat waves, wind sheets, volcanoes, tsunamis. The damage caused by disasters in immeasurable and varies with the geographical location, climate and the type of vulnerability. This influences the mental, socio-economic, political and cultural state of the affected area. It completely disrupts the normal day to day life, like food shelter, health etc.,

Disaster is a natural or manmade event that negatively affects the life, property, industry often resulting in pregnant changes to human ecosystem and environment. Disaster are highly events that cause suffering, deprivation, hardship and even death, an a result of direct injury, disease, interruption of commence and business and the partial or total destruction of critical infrastructure such as homes, hospitals and other buildings, roads, bridges power lines etc.,

Each year many places on the earth are struck by floods, storms, landslides, forest fires, earthquake, epidemics, which affect the human life. Besides there are other disaster caused by man as a result of rapid industrialization and urbanization. The above context made WHO to give the slogan "should disaster strike be prepared" in 1991. The theme reflects the need for creating awareness of the great damage to human health that can be caused by natural and manmade disasters[2]

India on account of its climatic and geographical setting – made out of 29 states and 7 union territories- has 22 states which are disaster prone. 28 percent of the country's total cultivable area is drought prone. 60 percent land mass is earthquake prone and 76 lakh hectares of land is flooded every year. Over 1300 lives are lost to floods every year. Asia has accounted for 83 percent of population affected by disaster globally the number of the people affected in the rest of the world was 1,11,159 were in Asia it was 5,54,459. Within Asia, 24 % of deaths due to disasters have occurred in India. Floods and high winds accounts for 60% of all disaster in India[3].

As per the centre for Research on the Epidemiology of Disasters (CRED) database obtained Emergency events Database (EM-DAT) the natural disasters that occurred in India between 1900-2004 is

Table 1.1 CRED Data in India between 1900-2004

Disaster	# of Events	Total killed	Average # killed	Total affected	Average # Affected
Cyclone	133	162,986	1226	91,3222,407	686,635
Drought	21	4,250,430	202,401	1,391,841,000	66,278,143
Earthquake	24	60,396	2,517	27,108,561	1,129,523
Flood	158	51,020	323	663,187,348	4,197,388
Volcano	-------	----------	-------	--------	----------

India is very large country and has more than its share of major natural hazards like drought, floods, earthquakes and cyclones throughout its history of civilization. Naturally the country developed its own practices and strategies for

coping with various natural calamities. There has been a paradigm shift in the approach to disaster management in the country. The new approach proceeds from the conviction that development cannot be sustainable unless disaster mitigation is build into the development process.[1].

Disaster Management Act 2003 defines disaster management as arrangement about managing the potential adverse effects of an event, including, (for example) arrangement for mitigating, preventing, preparing for responding to and recovering from a disaster[2].

Disaster management is the key programme of any nation to prepare and face any emergency situation of natural or manmade events. Thus disaster management includes disaster preparedness, planning, preventing or mitigating or responding to a disaster. Disaster preparedness and planning is an inter-sect oral exercise. It is the responsibility of the health care professionals to stimulate, coordinate the exercise. Health professionals can take more pro active approach; their responsibility is not only post disaster response, but starts from planning for an improved response and for prevention or mitigation of the disaster impact to allow for a healthier and happier life for all[3].

In disaster preparedness the emphasis should be given on public awareness, participations and development of self reliance. The identification of hazards and management of actions are best carried out with the close involvement of the community. So priority goes to educating the community in order to strengthen its capacity to prepare for and to cope with disaster situations[4]. As school students are more energetic and enthusiastic group, and also they are the future generations it would be appropriate to assess the knowledge regarding disaster management among selected school boys and girls, who would be the future citizens who can impart knowledge to their community.

Disaster is a natural or manmade event that negatively affects the life, property, industry often resulting in pregnant changes to human ecosystem and environment. Disaster are highly events that cause suffering, deprivation, hardship

and even death, an a result of direct injury, disease, interruption of commence and business and the partial or total destruction of critical infrastructure such as homes, hospitals and other buildings, roads, bridges power lines etc.,

1.1 **NEED FOR THE STUDY**

India is highly disaster prone country in Asia Pacific region with average of 8 major natural calamities a year, where floods cyclones, draughts, earthquakes and epidemics are frequent from time to time.

The WHO Collaborative Centre for Research on the Epidemiology of Disasters (CRED), Brussels state that frequency of disasters in the region has nearly quadrupled during the last 30 years with their impact on populations ranking on top over the regions. It is because of continuous increase in populations, active population migration. As per the latest seismic map brought out by the Bureau of Indian Standards (BIS), over 60% of the country is prone to earthquakes. Some of the most intense earthquakes of world have occurred in India, but fortunately, none of these have occurred in any of the major cities. Majority of the construction in these cities are earthquake- resistant. Thus any earthquake striking in one of these cities would turn into a major disaster[5].

The 2011 earthquake off the Pacific coast of Tohoku known as the 2011 Tohoku earthquake, the Great East Japan Earthquake. Earthquake, a magnitude 9.03 sea mega off the coast of Japan that occurred on 11 March 2011, approximately 70 kilometres east of the Oshawa Peninsula of Tohoku. It was the most powerful known earthquake ever to have hit Japan, and one of the five most powerful earthquakes in the world since modern record-keeping began in 1900. The earthquake triggered powerful tsunami waves that reached heights of up to 40.5 metres (133 ft) in Myakka in Japan travelled up to 10 km (6 mi) inland. On 12 September 2012, a Japanese National Police Agency report confirmed 15,878 deaths, 6,126 injured, and 2,713 people missing across twenty areas well as 129,225 buildings totally collapsed, with a further 254,204 buildings 'half collapsed', and another 691,766 buildings partially damaged. The earthquake and

tsunami also caused extensive and severe structural damage in north-eastern Japan, including heavy damage to roads and railways as well as fires in many areas, and a dam collapse.

The Nellore train fire occurred on 30 July 2012, when the Tamil Nadu Express train caught fire at 4:22 am near Nellore, Andhra Pradesh, India. At least 32 passengers died and 27 were injured. The fire gutted the S-11 sleeper coach in 20 minutes. A railway emergency crew prevented the fire from spreading to the other coaches.

The 2015 South Indian Floods resulted from heavy rain fall in November – December 2015, and badly affected states of Tamil Nadu and Andra-Pradesh especially Chennai in Tamil Nadu. A massive monsoon associated flood ravage Chennai, the impact involved 30.42 lakhs families, 3.42 to 4 lakhs crops, 98,000 live stock animals had faced the severe impact. The city recorded whooping 128.6 mm of rain. As a investigator had affected by the 2015 flood in Chennai, the impact is more. Because of the impacts of flood the investigator select this topic to create awareness and reduce impacts[6].

IEC refers to a public health approach aiming at changing or reinforcing health related behaviors in a target audience, concerning a specific problem and within a pre-defined period of time, through communication methods and principles. IEC package on disaster preparedness on flood among school children is strengthening the students confident in disaster management, promoting awareness and enhancing knowledge and skills of all students associated with migration, preparedness and response measures. The investigator believes that this package on disaster preparedness on flood will have a great impact and effectiveness on disaster preparedness.

A child has a greater capacity to observe, learn, experiment and transfer knowledge to others. It is more prone to a new way of life and changed come to it more naturally. A physically, socially and mentally healthy child can best learn whatever is taught in the school. The school children are more interactive and

intellectual group. To utilize leisure in productive and constructive manner, to enjoy recreation and to develop concern for others to help the younger generation become healthy and useful citizens, who will be able to perform their role effectively for the welfare of themselves their families and the community at large and country as a whole.

From the various sources the investigator identified that creating awareness among school children will bring drastic changes and impacts on disaster management among younger generations. The investigator was too affected by the flood in Chennai in the year 2015, all these made the investigator to conduct this study among selected school children and planned to develop an information booklet on disaster preparedness on flood.

1.2 **Statement of the problem**

"**Effectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District"**

1.3 Objectives of the study

1) To assess the level of knowledge regarding disaster preparedness in selected school children at Medavakkam, Kanchipuram District.
2) To assess the effectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District.
3) To find out the association between the post-test level of knowledge with selected demographic variables of selected school children at Medavakkam, Kanchipuram District.

1.4 Operational definitions

Effectiveness refers to the extent to which the package on disaster preparedness as desired effect in improving knowledge of selected school children at Medavakkam, Kanchipuram District as evidenced by gain of knowledge in post test score.

Disaster means the naturally occurring, flood due to increased rainfall which displace the structural, economic, organizational and cultural, spiritual well-being of the people and also destroy the normal life of the human beings and other living things.

Preparedness defined as set of actions (physical preparation and training) that are taken as precautionary measures in the face of potential disasters in achieving goals for avoiding negative outcomes regarding flood by public preparedness and local / emergency preparedness in selected school children at Medavakkam, Kanchipuram District, by pamphlets, posters, manual and power point presentation.

In this study **Information** refers to the way of providing knowledge regarding disaster preparedness on flood by manual.

Education involves teaching the selected school children regarding disaster, types of disaster, definition of flood, causes of flood, types of flood, ill effect of flood, flood preparedness on before, during, after and the future plans for prevention of flood to prevent the impacts of flood by manual and power point presentation.

Communication refers to the system and process that is used to communicate with the selected school children by lecture cum discussion method.

Selected school children refers to the boys and girls who are studying in selected Government High School at Medavakkam, Kanchipuram, District, between the age group of 11-14 years.

1.5 Assumptions

This study assumes that

1) The selected school children may have the inadequate knowledge regarding disaster preparedness.
2) Administration of IEC package on disaster preparedness among selected school children will increase their knowledge level.

3) School children are best conveyors of knowledge and the models to the future generations.
4) School children may have interest to know more about disaster preparedness.
5) IEC package may be an effective teaching tool.

1.6 Hypothesis

Ho1- There will be no significant difference between pre-test and post-test level of knowledge on disaster preparedness among selected school children at Medavakkam, Kanchipuram District.

Ho2- There will be no significant association between the post-test level of knowledge with selected demographic variables of selected school children at Medavakkam, Kanchipuram District.

1.7 Delimitations

- The study is limited to age group of 11-14 years
- Data collection is delimited to selected school children at Medavakkam, Kanchipuram District.
- The study period is limited to one month.
- Small sample size.

CHAPTER –II

REVIEW OF LITERATURE

Research and non-research literature related to the present study is reviewed and organized under the following headings.

2.1 Review of related literature

2.2 Conceptual Framework

2.1 Review of related literature

For the present study literature is reviewed and organized under four broad headings.

2.1.1 Disaster

2.1.2. Disaster preparedness.

2.1.3 Prevalence of disaster

2.1.4 Knowledge of disaster among school students.

2.1.5 Effectiveness of IEC package on disaster among school students.

2.1.6 Knowledge on disaster preparedness and mitigation among students

2.1,7 General information regarding disaster preparedness and mitigation.

2.1.1 Disaster.

A study was conducted to evaluate the effect of the earthquakes on the health practices in the rural town of San Sebastian. They used a convenient sample survey of subjects affected by the earthquakes. The sample included 594 people within 100 households. The 32 question survey assessed post earthquake conditions in the areas of health care and access to care, housing, food, water and sanitation. The result has shown that communicable diseases affected a number of family members. After the

earthquakes, 38% of households reported new injuries and 79% reported acute exacerbations of chronic illness[9].

A prospective study was conducted on disaster and subsequent health care utilization among victims of their family members and control subjects. The study results implies that (95% C I, 1.35-1.78) uninjured victims contact the family practitioner more often for mental health problems than adolescent community control subject (95% C I,1.69-12.20).In the adult family members in loss of child predicts overall utilization (95% C I, 1.35-2.63) and utilization for mental health (95% C I,2.10-35.92) during the first year post fire. The study concluded that attention should be paid to the primary care needs of bereaved individuals and those who have witnessed the disaster. [10]

A study was conducted on health services useful for earthquake- related psychological problems resulting from the 1999 earthquakes in Turkey. A random sample of 2007 survivors was assessed in too sites , using self- report measures of traumatic stress, depression and use of health services .The results show that earthquake survivors who need treatment might not be receiving it . [11]

A study was conducted on Hurricane-related orthopedic surgical admissions to an emergency department in December 1999.They examined records of all patients treated at the emergency department in the same time interval on the first three Fridays in December from 1994 to1998. 68% of the recorded injuries were injuries to the upper and lower extremities and 22% of the head and neck. The study concluded that Hurricanes can lead to substantial morbidity and mortality. Early warning is the most effective way of reducing the number of deaths and injury. People should seek cover and follow the instructions given by the news media. Educational programs for the medical staff of the emergency department should be made available.[12]

2.1.2 Disaster preparedness

A study was conducted to examine the hospital preparedness for incidents involving chemical or biological weapons. They used questionnaire survey of 224 hospitals, emergency departments in 4 northwestern states and they examined

administrative plans, training, physical resources and representative medication inventories. The result has shown that hospital emergency departments generally are not prepared in an organized fashion to treat victims of chemical or biological terrorism. [13]

A pilot study was conducted to assess the effectiveness of disaster conferences among 200 health care providers. The result has shown that among the 200 respondents, registered nurses (37%) and physicians (24%) were the largest categories of providers. Basic clinical care(39%) and triage (26%) were the most frequent response skills reported; the areas wherein respondents felt least prepared were disaster- specific response skills (22%) and systems issues (34%). Only 22% respondents reported that they did not know a specific skill. They made 495 individual recommendations for future responders, including actions to improve the respondent's personal preparedness (23%) and the need for training (25%). [14]

A study was conducted to describe the disaster preparedness concerning personnel at the hospitals. Questionnaire was sent to the chief doctor and chief nurse for the involved department, and a personal questionnaire was sent to all the doctors and nurses in the region, who had participated in one or more courses in disaster medicine during the period 1990-1995. The findings have shown that 7% of the residents, 29% of the senior residents and 56% of consultants, 33% of the Nurses had taken a course in disaster medicine. Only 15% had taken more than one course, and as few as 2% had a follow up course to primary one given in the region. 41% had used their acquired knowledge either in theory or practice: 55% for educational purposes, 11% for disaster planning and 12% for buying equipment for the hospital.[15]

A study was conducted on assessment of emergency preparedness. They used questionnaires, observation, and interviews to gather data. The target population was comprised of 10 professional cohorts: physicians, nurses, public health and mental health professionals, health educators, veterinarians, pharmacists, dental professionals, law enforcement and emergency/ fire personal. The findings revealed that the highest awareness and knowledge levels occurred with physicians, nurses

and public health professionals. On- site coordination and communication systems were the weakest aspects of coordinated community response. [16]

A Study was conducted on mental health and psycho-social aspects in disaster preparedness in Nepal. Nepal has high venerability to natural disasters. Floods, land slides and earthquakes are the most regularly occurring disasters in Nepal. There is a health sector emergency and disaster response plan of the ministry of health. But mental health and psycho-social relief is not adequately addressed in this plan. They concluded that further strengthening of the mental health and psycho social aspects of disaster preparedness is needed[17].

2.1.3 Prevalence of disaster

Srikant Sharma et,al, (2015) A cross-sectional study was conducted attempted to evaluate the psychological impact and its risk factors in Uttarakhand disaster after 1 month in the primary survivors. All the included subjects were administered the semi-structured proforma for assessing the socio demographic profile and the assessment instruments: Impact of events scale-revised (IES-R), depression anxiety stress scale and life orientation test-revised (LOT-R). Data were imputed and analyzed using Statistical Package for Social Sciences version 17.0.1 (SPSS Inc., Chicago, IL, USA). Results: About 58% subjects had posttraumatic stress disorder and significantly severe levels of depression, anxiety, and stress were noted in 45.3%, 57%, and 44.2% subjects, respectively. A physical illness was present in 36% subjects. Loss of at least one family member was reported by 12.8% subjects. LOT-R scores were negatively correlated to IES-R[18].

Elangovan Aravind Raj, Sekar kasi (2014) Quasi Experimental Design – pre- and post- with control group was adopted was conducted on impact of disaster on children of different age group is many times greater than that of the adults. Psychosocial disaster preparedness, through teachers, is one among the best ways to prepare children to face the psychosocial consequences of disasters. The hypotheses of the study are (i) better the psychosocial intervention methodology, higher the knowledge levels on psychosocial care and preparedness among the teachers and (ii) higher the psychosocial disaster preparedness knowledge among teachers, better

the knowledge among children training by them. Results showed that teachers who were provided training on psychosocial disaster preparedness had better knowledge than the control group. ($t=43.6$, $p<0.001$)[19].

Yashobanta Parida (2013) study examines the impact of economic development on flood impacts in terms of human mortalities and economic losses in 19 Indian states from 1980 to 2011. The empirical estimates show that higher economic development causes a decline in flood impact measured in terms of human mortality and economic losses. The study finds that better achievement in Human Development Index (HDI) has significantly minimized flood related mortalities. In addition, the study analyzes the relationship between disaster expenditure and economic loss for all Indian states. The empirical estimates based on IV To bit model show that disaster expenditure has significantly reduced the size of economic loss due to flood. In this context, the role of politics in the prevention of flood mortalities is also examined. The estimates show that inclusion of state election year and political alignment (measured by the presence of the same political party in government or coalition political party in government both Centre and State) has significantly minimized flood impact in terms of human mortalities in Indian states. In order to obtain robust results, IV Poisson model and IV To bit model is used to estimate the economic impact of flood s in Indian states. Overall, the findings are also consistent with Poisson estimates and To bit estimates[20].

Jose Manuel Rodriguez-Llanes, et al (2010) investigated to what extent floods exacerbate poor nutritional status in children and identify most vulnerable groups, we conducted a population-based survey of children aged 6–59 months inhabiting flooded and non-flooded communities of the Jagatsinghpur district, Odisha (India), one year after large floods in 2008. Anthropometric measurements on 879 children and child, parental and household level variables were collected through face-to-face interviews in September 2009. The association between flooding and the prevalence of wasting, stunting and underweight was examined using weighted multivariate logistic regression for children inhabiting communities exposed solely to floods in 2008 and those communities repeatedly flooded (2006 and 2008) controlling for parental education and other relevant variables. We

examined the influence of age on this association. Propensity score matching was conducted to test the robustness of our findings. The prevalence of wasting among children flooded in 2006 and 2008 was 51.6%, 41.4% in those flooded only in 2008, and 21.2% in children inhabiting non-flooded communities. Adjusting by confounders, the increased prevalence relative to non-flooded children in the exposed groups were 2.30 (adjusted prevalence ratio (APR); 95% CI: 1.86, 2.85) and 1.94 (95% CI: 1.43, 2.63), respectively. Among repeatedly flooded communities, cases of severe wasting in children were 3.37 times more prevalent than for children inhabiting in those non-flooded (95% CI: 2.34, 4.86) and nearly twice more prevalent relative to those flooded only once[21].

Nilamadhab Kar (2010) conducted cross-referenced articles and relevant researches conducted on disasters in India which are published elsewhere were the secondary sources of information. There have been many epidemiological studies and only a few interventional studies on disasters in India. Prevalence figures of psychiatric disorders varied considerably across studies, secondary to nature and severity of disaster, degree of loss, support available and probably also due to the study methodology. Suggestions for intervention included pre-disaster planning, training of disaster workers, utilization of community-level volunteers as counsellors, and strengthening existing individual, social and spiritual coping strategies. There is a need for more longitudinal follow-up studies and interventional studies[22].

Elangovan Aravind Raj, Sekar kasi (2014) Quasi Experimental Design – pre- and post- with control group was adopted for the study conducted on impact of disaster on children of different age group is many times greater than that of the adults. Psychosocial disaster preparedness, through teachers, is one among the best ways to prepare children to face the psychosocial consequences of disasters. The hypotheses of the study are (i) better the psychosocial intervention methodology, higher the knowledge levels on psychosocial care and preparedness among the teachers and (ii) higher the psychosocial disaster preparedness knowledge among teachers, better the knowledge among children training by them. The aim of the study was to develop psychosocial disaster preparedness among school children by

imparting training on psychosocial preparedness to them through trained teachers. Results showed that teachers who were provided training on psychosocial disaster preparedness had better knowledge than the control group. Higher the psychosocial disaster preparedness knowledge among teachers, better the knowledge among children subsequent to training by them compared to children from control group ($t=43.6$, $p<0.001$)[23].

2.1.2 Knowledge of disaster among school students.

Chipo Mudavanhu, Bernard Manyena and Andrew E. Collins et al (2016) conducted a qualitative approach, 40 individual interviews and four focus group discussions were held with school-going children between 8 and 18 years. Results indicated that children had a good basic knowledge about the disaster risks they were facing. Ranking the hazards according to their severity and frequency, children indicated that droughts were most common, but floods were the most severe. Floods were described as the most frightening, dangerous, destructive, and sometimes unpredictable. The sight of collapsed houses and schools was disturbing for children and served as a reminder of past danger and something that is likely to happen repeatedly. Children developed understanding of drought and floods from experience, school, and family. The memorability of past events had led to heightened perceptions of risk which implies that the respondents perceived risks to the extent or magnitude that they had previously experienced them[8].

Ali S. Mobarak1, Raouf M. Afifi, Amani Qulali (2015) assess the awareness of Saudi secondary school students regarding FA and BLS. 360 male secondary school children in Taif, Saudi Arabia were surveyed. Results: The mean students'age was 17.4 ± 1.21 years. The mean participants' FA knowledge score was 64.8% ± 11%. Generally, trained students reported both better FA knowledge and skills than untrained counterparts; for 79.6% trained-compared to 53.7% untrained-students recorded such score > 70% [$\chi2(df1) = 11.60$, $p < 0.001$]. The younger the age was, the higher opportunity to record a high score (>70%) [62.3% <17 y vs. 49.3% ≥17 y, $\chi2(df\ 1) = 5.90$, $p = 0.02$] was. Trained students better deal with critical cases, bleeding and bodily injury compared to untrained peers [89.8%

vs. 55.9%, $\chi 2(df1) = 20.3$, $p < 0.001$; 83.7% vs. 58.2%, $\chi 2(df\ 1) = 11.62$, $p = 0.04$; 81.6% vs. 67.2%, $\chi 2(df\ 1) = 4.13$, $p = 0.04$, respectively]. Only 37.2% of schools had FA incorporated in the education curriculum. Eventually, FA training and the presence of FA group were significant predictors for improved FA knowledge among students [odds ratio (OR) 3.35, 95% CI 1.60 - 7.06; OR 2.28, 95% CI 1.34 - 3.95, respectively).

Vladimir M. Cvetković1, et al (2015) quantitative research is to determine the perception and actual knowledge of secondary school students in the Belgrade region with respect to earthquakes as a natural disaster and security threat, and to identify the factors that influence their knowledge and perceptions. The authors used a method of surveying students to identify and describe the factors that influence student knowledge and perceptions about earthquakes. For the purpose of this research, a sample of 3,063 students was drawn from the total population of secondary school students in Belgrade (65,561 students), which equates to 4.67% of the population. The results show that the sources of information on natural disasters and their threatening consequences influence the perceptions of secondary school students. In view of the evident lack of education about natural disasters in Serbia, the results of this study can be used when creating a strategy for educational programs. This research is the first step in developing and realizing a future strategy for natural disaster management by informing and including public (school population), scientific, and administrative communities in the process[10].

Gangalal Tuladhar, et al (2014) conducted a study on benefits of existing education programmes of DRR in Nepal. Altogether, 124 students from 17 districts were interviewed and various questions related to disaster information, disaster knowledge, disaster readiness, disaster awareness, disaster adaptation, and disaster risk perception were asked. Statistical analysis such as histogram analysis, distribution analysis, bivariate correlations, and independent sample t-tests were conducted to examine the relationship between students in disaster education-related programmes and the key DRR issues related dependent variables. Findings of this independent research confirmed that initiatives taken for disaster education in Nepal are not enough and a major challenge for DRR in a school community for

a country like Nepal is implementing methods, especially at the individual level. Likewise, the disaster education should not only be confined within the school students, but it must also be promoted to families and communities, which is very essential to elaborate knowledge of DRR and to contribute to a disaster safe society in the country[11].

Gangalal Tuladhar (2013) explored benefits of existing education programmes of DRR in Nepal. Altogether, 124 students from 17 districts were interviewed and various questions related to disaster information, disaster knowledge, disaster readiness, disaster awareness, disaster adaptation, and disaster risk perception were asked. Statistical analysis such as histogram analysis, distribution analysis, bivariate correlations, and independent sample *t*-tests were conducted to examine the relationship between students in disaster education-related programmes and the key DRR issues-related dependent variables. Findings of this independent research confirmed that initiatives taken for disaster education in Nepal are not enough and a major challenge for DRR in a school community for a country like Nepal is implementing methods, especially at the individual level. Likewise, the disaster education should not only be confined within the school students, but it must also be promoted to families and communities, which is very essential to elaborate knowledge of DRR and to contribute to a disaster safe society in the country[12].

Virginia Clerveaux, et al (2008) revealed a challenge for disaster planners, especially as this relates to the development of appropriate tools and techniques for the enhancement of the disaster knowledge base of children. Specifically, disaster management planners are challenged in ensuring not only that the information provided is appropriate to the information-assimilation capacity of children but also that the appropriate tools and techniques are developed to ensure effective conveyance of information through a medium that is neither stoic nor boring. The disaster awareness game presented in this article was designed with these challenges in mind and is intended to evaluate and promote disaster awareness in children. Preliminary results suggest that the tool is effective in meeting this objective[12].

2.1.3 Effectiveness of IEC package on disaster among school students.

Elangovan AR, Kasi S (2015) conducted a Quasi Experimental Design - pre- and post-with control group study was to develop psychosocial disaster preparedness among school children by imparting training on psychosocial preparedness to them through trained teachers. It showed that teachers who were provided training on psychosocial disaster preparedness had better knowledge than the control group. Higher the psychosocial disaster preparedness knowledge among teachers, better the knowledge among children subsequent to training by them compared to children from control group ($t=43.6$, $p<0.001$)[13].

Seham A. Abd El-Hay, et al (2015) assessed the effect of training program on students 'knowledge and practice regarding first aid and basic life support in industrial secondary schools. The study used a quasi experimental design to collect data from two selected industrial secondary schools that representing the two educational sectors at Tanta City, Elgharbia Governorate, which named; the textile and mechanical secondary school. A convenient sample of 60 students who divided as following; 30 female students from all classes in textile secondary school and 30 male students from all classes in mechanical secondary school. Two tools used for data collection, Too(1); an interview questionnaire to assess student's knowledge regarding first aid and basic life support and tool; observational check list sheet related to first aid and basic life support performance. As a result of this research, it was determined that all students have poor mean score of knowledge and practice regarding first aid and basic life support. Post program more than half of them had good mean score of knowledge and 86.7% of them had good mean score of practice[14].

Manila Mathews (2015) conducted a evaluative study approach was used to assess the effect of planned teaching programme with mock drill on knowledge of fire accident preparedness among high school children. Randomized sampling technique by lottery method was used to select the school and then convenient sampling technique was used to select the subjects. The study was conducted among 200 high school children of 8th and 9th standard at Milagris High School,

Mangalore. The data was collected using a baseline Performa and structured knowledge questionnaire on the first day. Then the planned teaching programme with mock drill was administered on the same day, after which the post-test knowledge of the students was assessed after a gap of seven days using the same knowledge questionnaire. The data obtained is analyzed using both descriptive and inferential statistics based on the objectives and hypothesis of the study. The planned teaching programme with mock drill on fire accident preparedness is the best weapon to improve the knowledge and helps in preparing them to face the disaster[15].

Susan Wolf-Fordham, et al (2015) conducted a online survey with 314 self-selecting US parents/guardians of children with DD, aged birth-21 years. Most participants assessed themselves to be somewhat to moderately well prepared, even those who reported being "very well prepared" had taken fewer than half of 11 recommended action steps. Most participants expressed a need for preparedness support; virtually all the respondents felt that training was either important or very important. This study appeared under-prepared to meet family disaster needs, although they recognized its importance. The results suggest opportunities and methods for public health and safety planning, education and outreach to parents of children with DD who would benefit from targeted training such as information and skill building to develop effective family preparedness plans and connections to local emergency management and responders[16].

Kevin R. Ronan 1, and Briony Towers (2014) elucidated means by which hazards and disaster preparedness education programs for children can shift to systems-based models, those that incorporate both systemic epistemologies but also more systems-based, and interconnected, curricula. This includes curricula that help children connect the physical world and science with the social world and human factors. It also includes the more systemic idea that natural hazards are but one example of a larger category of problems in life related to risk and uncertainty. Thus, a main aim of a systems educational approach is to help children equip themselves with knowledge, skills, motivation and confidence that they can increasingly manage a range of risks in life. This includes an increasing

understanding of the added value that can be gained from approaching problems with systemic tools, including producing increasingly effective and sustainable solutions to what public policy refers to as wicked problems[17].

Wignyo Adiyoso and Hidehiko Kanegae (2013) conducted study to assesses the effectiveness of disaster risk education (DRR) in schools by comparing students in two junior high schools regarding action taken in earthquake preparedness and major factors of disaster preparedness such as risk knowledge, risk perception, critical awareness and attitude. Data on earthquake preparedness and other variables were collected from two junior high schools in Yogyakarta, Indonesia. Participants were 124 students from a school adopting disaster risk reduction education and 115 students from a school not adopting it. Multivariate Analysis of Variance (MANOVA) revealed that there was a significant difference in investigated variables among students although their level of actual preparedness was quite low. This study provided evidence that having a school adopting disaster risk reduction issues effectively enhanced knowledge, risk perception, critical awareness and attitude but limited in preparedness behaviour. Efforts should be taken by policy makers, teachers, and other stakeholders to develop public education in schools focusing on changes in preparedness behavior[18].

Wignyo Adiyoso and Hidehiko Kanegae (2012) conducted a study to examine the effect of different disaster education programs on school children's knowledge, risk perception, awareness and preparedness behavior. Data gathered from 169 school children (Group 1=98 and Groups 2=71) in 3 elementary schools in Aceh. Using the MANOVA analysis revealed that there was significant difference of knowledge, risk perception, individual preparedness and school preparedness but not for critical awareness among school children. This study provides evidence that the curriculum-based disaster education program was effective[19].

Hellen Mamosegare Mamogale (2011) conducted a study to determine the extent to which disaster preparedness was achieved by learners and educators in schools located in Soshanguve North by sourcing data from principals, educators,

learners and school safety committees. The research methodology used in this study to solicit views of school principals, teachers, learners and school safety representatives was a mixed research approach where data was obtained through questionnaires and interviews. The sample of research population comprised of ten schools, five primary schools and five secondary schools around Soshanguve North, Tshwane District. Fifty participants filled out questionnaires, and ten participants responded to interviews. Data collected was computed by means of excel spreadsheet and results were presented in the form of pie and bar graphs with narrative explanations. It showed that educators were not trained in disaster management. The surprising finding of the study was that learners tended to be the ones who were aware of disaster preparedness in this study when their knowledge about hazards and disasters acquired at school was assessed[20].

Michelle T. Edwards and Kerry-Ann N. Morris (2010) examined the efforts of Jamaica's risk reduction programme, through the Office of Disaster Preparedness and Emergency Management (ODPEM), to address the special needs of children in disaster situations, with a focus on what has been done in meeting these needs and how effective these interventions have been. Children make up approximately half of the total Jamaican population. This makes it very necessary for disaster management to focus on the needs of this very vulnerable group[21].

Fanog.Y.Dai.L.(et al 2007) conducted a research study conducted on child deaths in Xiamen city suburbs, people's republic of china, 2001 to 2005,drowning deaths in 1-14 yrs old children between 2001and 2005 were identified, 52(72.6%) were in children aged 5-9 yrs (40.3%) and 10-14 yrs (40.3%).The droning mortality per 100000 population was 5.84 in rural areas and 0.75 in urban areas. Results from multivariable poison regression analysis indicated that 10-14 yrs old boys were at the highest risk of drowning deaths in this area. Different prevention strategies may be requiring for prevention child drowning death. The evidence gathered during the course of this research clearly points to positive outcomes for children as a result of the integration of DRR into education. While it was not always possible to document the specific outcomes, for example, in the two country case studies where

disasters had not struck since the time of implementation, it was very clear that significant change[22].

2.1.5 General Information regarding disaster preparedness and mitigation;

A study was conducted to characterize emergency preparedness in vulnerable population and to ascertain the role of the personal assistant (PA) and the potential impact of prior emergency experience on preparedness efforts. Among 253 community residents with cognitive and / or physical disabilities, 62.8 % of the participants had previously experienced one or more large scale emergencies, only 47.4 % of the entire sample and 53.3% of those with actual emergency experience reported preparing an emergency plan. 63 % of these reported a plan had involved their PA in its development. Participants who reported such involvement were significantly more likely to have higher scores on the emergency preparedness scale (p,.001) Participants who had experienced a prior emergency wee also more likely to score higher on the emergency preparedness scale ($p<0.001$).These findings highlight the need for additional study on emergency preparedness barriers in people living with disabilities so that effective strategies to reduce vulnerabilities can be identified[24].

A Study was conducted to recognize and compare almost all the components of disaster preparedness between teaching and private hospitals in Shiraz, Iran, focusing on incident command systems (ICS), communications, surge capacity, human resources, supply management, logistic service, case management, surveillance, laboratory and operating room management, 24 out of 31 hospitals were responded for this study. The scores for preparedness of ICS, communication, sure capacity and human resources was 73.9% 67.3%, 49% and 52.6% respectively. The preparedness scores for supply management and logistic services were 68.5 % and 61.8%. While the levels of preparedness of laboratory and operating room management were low, preparedness of the surveillance system and case management were 66.7% and 70.8% respectively. The average total preparedness of all hospitals was 59.5% with scores of 62.2% in teaching hospitals and 55% in private hospitals. At the time of study, the total preparedness among hospitals was

at the intermediate level, but in some key components such as operating room management, surge capacity and human resources, the total preparedness was very limited and at an early stage of development, therefore, requiring urgent attention and improvement[25].

A study was conducted among 639 Italian medical students to identify the perceptions of mass casualty incidents and disasters. The results of the study shows that 38.7% had never heard about disaster medicine.90.9% had never attended elective academic courses on disaster medicine; 87.6% had never attended non-academic courses on disaster medicine' 91.4% would welcome the introduction of a course on disaster medicine in their core curriculum; and 94.1% considered a knowledge of disaster medicine improvement for their future career. Most of the students surveyed had never attended courses on disaster medicine during their medical school program. However, respondents would like to increase their knowledge in this area and would welcome the introduction of specific courses into the standard medical curriculum[26].

A study was conducted to assess and evaluate the disaster management among 325 residents by using a strutted interview questionnaire. The result of the survey indicates that, more than 90% of residents lacked tsunami knowledge. 10 % of school children do not yet understand what causes a tsunami; 90% of school children have aneven interest in studying natural disasters; comprehensive disaster education has not been provided; and audio-visual means are thought to be the most effective tool for disaster education. The survey of officials shows that; seminars and drills on natural disaster have not been conducted among general officials other than the military and police; measures need to be developed to safeguard the interests of tourists; and sirens, TV and radio broadcasts are effective tolls for disseminating disaster warnings to residents[27].

A historical review was conducted to describe the impact of tsunamis on human populations in terms of mortality, injury, displacement and, to the extent possible. The findings were 2, 55, 195 deaths (range 252,619-275,784) and 48,462 injuries (range 45,466-51,457) as a result of tsunamis. The majority of deaths (89%)

and injuries reported during this time period were attributed to a single event, the Indian ocean tsunami. Findings from the systematic literature review indicate that the primary cause of tsunami-related mortality is drowning, and that of females, children and the elderly are at increased mortality risk. The few studies reported on tsunami related injury suggest that males and young adults are at increased injury risk. The conclusion of the study states that Early warning systems may help to mitigate tsunami-related loss of life[30].

A cross sectional cluster survey was conducted to describe the impact of floods among 1769 households conducted in 29 most affected districts of Pakistan. 20 million people were affected due to flood. The flood destroyed 54.8% of homes and caused 6.8% households to move to other places. Lack of electricity increased from 18.8% to 32.9%. lack of toilet facilities from 29% to 40.4%. Access to protected water remain unchanged (96.8%), however, the resources changed. 88% reported loss of income with rural households. Immediate deaths and injuries were uncommon. But 77.0% reported flood related illnesses. Significant differences were noted between urban and rural as well as gender and education of the head of household[31].

A study was conducted to identify the level of disaster preparedness and management in reducing human sufferings in the earthquake in Gujarat, India. Nearly 20000 people were killed, 1,70,000 were injured and 6,00.000 were render homeless. the disaster relief evaluation revealed that relief provided to disaster victims had reduced quality by the following proper public health indicators had not yet been developed: inefficient co-ordination was lacking, delayed relief actions and policies on delivery of disaster relief not yet been developed. The study concluded that a successful disaster response will depend on accurate and relevant medical intelligence and planning in advance of during and after disaster[33].

2.1.4. Knowledge on disaster preparedness and mitigation among students:

A cross sectional study was conducted to evaluate the factors associated with preparedness against an earth quake in Tehran city among 1195 people aged 15 years or older. The analysis shows that 1076 (90.0%) 1160 (97.1%) and 490

(41.0%) of the participants achieved half of the possible scores for the knowledge, attitude, and practice components, respectively. Furthermore, in multivariate analysis low knowledge (p,.001), having a high school (p=0.033) or lower education (p,0.001) and living in Northern high-risk regions (p,0.001) of the Tehran were identified as risk factors for taking precautionary measures against earthquake. For low knowledge, lack of previous experience and working as labor, businessman, employee (p=0.001) or being housewife (p=0.002) were related risk factors. In addition, people in the southern high risk regions were significantly more knowledgeable (OR-0.618) compared to people in low risk regions). It is suggested that preparedness programs should target people with lower educational level and people in high risk regions especially the northern districts of the city and aim at increasing public knowledge about earthquakes[34].

A cross-sectional study was conducted to evaluate the knowledge, attitudes and practices (KAP) among 630 students (359 female, 266 male, 5 not identified) in 32 elementary schools towards five prevention in Thailand. The mean of age of the studied subjects was 11.09 plus or minus ad ranged from 6 to 13 years. The results indicated that no gender differences were with the level of knowledge, attitudes and practices (p=0.072, 0.149 and 0.235 respectively. And the Pearson chi-square showed that the level of knowledge, attitudes was not associated with practices (p=0.256 and 0.572) respectively. The finding also revealed that the students who had not been trained in five evacuations had more inappropriate behavior or practice and poorer attitude toward fire than those had the experience. Strategy planning to improve attitudes and practices through proper training for five evacuations among students are needed[35].

A study was conducted to design a questionnaire by using a new approach (systemic networks) to investigate the existing knowledge of earthquakes among 823 students from 5th to 8th grades. Participants in the sample were chosen from two separate locations; Aydin, Turkey, which is in a high risk earthquake zone; and Columbus OH, which is in a low risk zone. The majority of students in the United states had received formal instruction about earthquakes., whereas the majority of students in Turkey had not. Comprehensive Exploratory Factor Analysis (CEFA

version 1.03 for MS Windows) was used to examine student's patterns of thinking. Ten factors were found for the common thinking pattern, 10 factors represented separate themes framed around the features of systemic networks. The research showed similarities as well as differences between the responses. The US student's scientific knowledge about earthquakes was significantly higher than Turkish students and they held fewer naïve beliefs than Turkish students about the definition of earthquake and about how earthquakes happen. Less than half of the students in both countries know about earthquake safety. Also students who had experienced an earthquake did not have better knowledge about them. The success of this study suggests that the network design of the questionnaire might have broader application to different subject matter and concepts[36].

A study was conducted to assess the knowledge, attitude and behaviors regarding disaster management among 135 post graduate (PG) students in a private dental institution in Dharwad, India. A cross sectional design was used. The result of the study show that PG students 125 (92.59%) participants responded in the study. Mean knowledge (58.74), attitude (85.78) and behaviors (31.60) scores were identified. Significant correlations were observed between knowledge and year of study (a^2=45.301,p=0.000), and behavior and place of residence of respondents ((a^2=4.112,p=0.043). The study concluded that the participants had low knowledge and behaviors scores, but high attitude scores regarding disaster management. The year of study and the place of residence were associated with knowledge and behavior. This study suggests the need for curriculum changes in dental education and has policy implications for disaster management in India[37].

A study was conducted to assess the objective knowledge, attitude, behavior and perceived knowledge regarding disaster management among 86 Indian dental graduates, Manipal College of dental sciences, Mangalore by using a questionnaire method. The result shows that a majority (98.8%) of respondents were willing to participate in disaster management. Mean objective knowledge *48.64), attitude (80.26), behavior (29.85%) and perceived knowledge wscores were (60.80%). Males reported higher perceiv3ed knowledge than females (P=0.008), and respondents residing in hospitals reported higher perceived knowledge than those

not re siding in hostels (p=0.02). Gender showed significant correlations with attitude (r=4.076, p=0.044) and behavior (r=3.722,p=0.054), and residence with behavior of respondents (r=5.690,P=0.017). The study concluded that high degree of willingness to provide assistance during disasters was observed among undergraduate dental students[38].

2.2 Conceptual framework

J.W. Kenny's open system Model

The study is based on the concept that administration of IEC package on disaster preparedness among selected school children to improve level of knowledge. The investigator adopted the conceptual frame work of this study is based on J.W. Kenny's open system Model. All living system is open in that there continuous exchange of matters, energy and information. Open system vary in the degree of intention with the event the system received input and give back out put in the form of matter energy and information. For survival all system must receive varying types, amount of matters and information. The main concepts of the system theory are input, through put, output and feedback. This model of J.W. Kenny's Open system (2009) is suited to this study which is under taken to assess the knowledge regarding disaster preparedness among selected school children using pre-test and post-test.

Input

Input refers to resources taken or received from the external environment. In this study input refers to administration of IEC package on disaster preparedness among selected school children to the improve level of knowledge.

Through put

Through put refers to the process of conversion of resources within the system. In this study through put refers to the transformation of knowledge among selected school children regarding disaster preparedness

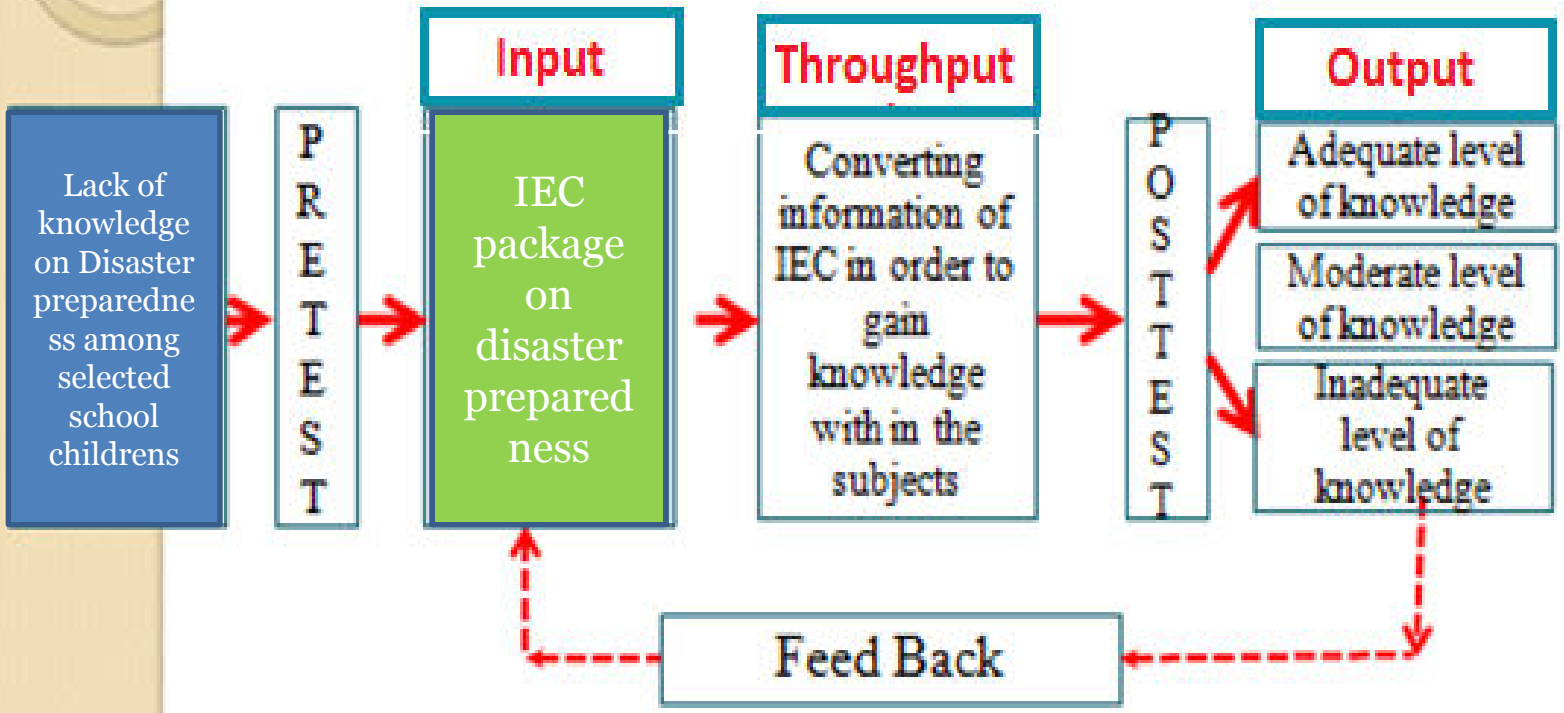
Output

After processing the input system returns to output. It refers to the knowledge and information that are processed. In this study output refers to the outcome that increase in the level of knowledge as measured by post-test.

Feed back

Feedback refers to Information sent backward from the output to the input and the process in order to gain understanding and modify the level of knowledge by analysis of the post test. The conceptual frame work based on J.W. Kenny's Open system model is presented in figure 2.1.

CONCEPTUAL FRAME WORK



C H A P T E R – III

RESEARCH METHODOLOGY

This chapter deals with methodology which is followed, "**Effectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District"**.

3.1 Research approach

In the current study **Quantitative research approach - pre-experimental research design.**

3.2 Duration of the study

The study was for the period of 4 weeks (18-11-19 to 20.12.16).

3.3 Study setting

The study was conducted at Govt. Higher Secondary school, Kanchipuram Dist. The school which was selected for the research study is a Govt. Girls. Higher Secondary school at Medavakkam with 1361 (male-657, female-704) students. In this school which has 42 teaching and 5 non-teaching faculties. . An upgraded primary health centre is situated nearer to the school which covers a population of more than 50,000 population. The RBSK team conducts health visits to the school once in every month. They do the weight, height checking, vital signs monitoring & immunization and regular follow up and also referral services.

3.4 Research Design

One group pre-test and post test design, which is true experimental design in nature, is adopted for conducting the study. In this study, the investigator administered pre-test for selected school children and the researcher distribute IEC package on disaster preparedness to the selected school children and then the post test was conducted. Finally the effect of IEC package on disaster preparedness was computed by the post test.

Phase I: Level of knowledge regarding disaster preparedness among selected school children

Phase II: The research design is represented diagrammatically as follows

Diagrammatical representation of research design

Group	Pre test	IEC Package	Post test
Study Group	O1	X	O2

O1 - Assessment of pre test level of knowledge on disaster preparedness among selected school children in Experimental group.

X - Distribution and explanation of **IEC** package on disaster preparedness among selected school children in experimental group for 30 - 45 minutes.

O2 - Assessment of post test level of knowledge after distribution of IEC package disaster preparedness among selected school children in Experimental group.

3.5 Study Population

Study population consists of school children in the Medavakkam, Kanchipuram District who are met inclusion criteria.

Ttarget population comprises of all school children who are studying in selected Government Higher Secondary School at Medavakkam, Kanchipuram District.

Accessible population was school children who were studying 6, 7, 8th standard at Government Higher Secondary School at Medavakkam Kanchipuram District.

3.6 Study sample

Sample size for the present study is **selected school children** in the age group of 11-14 years, who satisfied the inclusion criteria.

3.7 Sampling criterion

The sample is selected based on the following criteria.

3.7.1 Inclusion criteria

- The students belong to the age group of 11-14 years
- The selected school children who are willing to participate
- School children who are able to speak / or understand Tamil & English.
- The students who are studying 6^{th} standard to 8^{th} standard.

3.7.2 Exclusion criteria

- The selected school children who are not willing to participate.
- The selected school children those who are exposed to any education programmes related to disaster preparedness.

3.8 Sample size

Sample size for the present study is **60 selected school children** in the age group of 11-14 years, who satisfied the inclusion criteria.

3.9 Sampling technique

Simple random sampling technique by lottery method.

3.10 Research variables

3.10.1 Independent Variable – IEC package on disaster preparedness

3.10.2 Dependent variable – Knowledge of selected school children

3.11 Development and Description of tool

Based on the objective structured knowledge questionnaire is prepared to assess the knowledge of the selected school children regarding disaster preparedness . The tool used for the research study is a structured knowledge questionnaire to assess the knowledge regarding disaster preparedness. The tool was formulated based on review of literature and discussion with the experts in the nursing and medical field after construction of an initial model of structured knowledge questionnaire. They were modified several times after consultation with the experts in the field of medicine and nursing.

Description of the tool

The tool includes two sections. i.e. **Section I and Section II**.

Section – I

It consists of items related to demographic data of the adolescent girls which includes **age, sex, educational status, place of living, language known, economic status, type of family, number of children in the family, sources of information regarding disaster preparedness and previous knowledge about disaster.**

Section – II

This comprised of a self-administered structured knowledge questionnaire. The questionnaire had 20 items to assess the level of knowledge on disaster preparedness . Each item coins one correct response.

Scoring and interpretation

A score of **'one'** is allotted for every correct answer and score '**zero**' is allotted for every wrong answer.

The total attainable score for the knowledge item is 20. The total score is converted in to percentage and the resulting score is ranged as follows

Score interpretation:

Minimum Score =0 Maximum Score = 1 Questions =20 Total Score =20

S. No	SCORE	% OF SCORE	GRADE
1.	0-10	0% - 50 %	Inadequate
2.	11-15	51% - 75%	Moderate
3.	16-20	76% - 100%	Adequate

3.12 Content validity

The structured knowledge questionnaire is developed by the Investigator based on review of literature. The tool was submitted to five experts in the field of nursing and medicine for content validity. All items had 100% agreement by experts. Then the questionnaire is translated in to Tamil and English by language experts. Validity of the tool was assessed using content validity. They suggested certain modifications in tool. After the modifications in the tools agreed this tool for evaluate the effectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District.

3.13. Protection of Human subjects:

Ethical consideration refers to a system of moral values that is concerned with the degree to which research procedure adheres to professional, legal, and social obligations to study participants. Research proposal was approved by experts prior to the pilot study and permission for the main study was obtained from the ethical committee, Head of the department of community medicine, Madras Medical College, Chennai-3. Permission was also obtained from the Deputy Director of Health Services and Chief Educational Officer. No routine activities was altered / with held. Thus the investigator followed the ethical guidelines which where issued

by the Institutional Ethics Committee. A written consent of the each study subject was obtained before starting the data collection, assurance was given to the study subjects and confidentiality would be maintained.

3.14 Reliability

Reliability of the tool was assessed by using Test retest method and its correlation coefficient r-value was 0.86 (knowledge). This correlation coefficient is very high and it is good for evaluate the effectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District. Demographic data collected by interview method.

3.15 Pilot study

A small scale vision was conducted among 5 samples of selected school children . rapport was established with the selected school children and brief introduction about the study was given. A written consent of the each study subject was obtained before starting the data collection, assurance was given to the study subjects and confidentiality would be maintained. The study was found to be feasible and hence the same procedure was decided to be followed to the main study. There was no modification made in the tool after pilot study. The samples selected for the pilot study, they not included for the main study.

The pilot study revealed that the study was feasible. Data were analyzed with Descriptive and inferential statistics.

3.16 Data collection procedure

Data collection is the gathering of information needed to address a research problem. The data collection was done for a period of one month. The researchers took written permission from the Head of the institution to conduct the study, and consent was obtained from the participant of the study. An assurance was given regarding confidentiality of the data throughout the study. Researcher collected the data from the selected school children . The data collection was done (18-11-16 to -20-12-16) for four weeks between 9 am to 4 pm. To collect the details of the

schools in Kanchipuram District, researchers had visited the Chief Education Office in first week of October 2016. There were totally 52 higher secondary schools in Kanchipuram District. The researchers selected the Govt. Higher Secondary School in Medavakkam, rural area. The researcher obtained formal permission from the school Headmaster for conducting research in the first week of December 2016. 60 selected school children, who fit in to the selection criteria were selected by **simple random sampling technique by lottery method.** The data were collected in two steps.

Step – I

During this time, the researchers introduced themselves to the selected group of selected school children and obtained their consent. Then the study was explained and assurance regarding confidentiality of the answers is provided. The selected school children were asked to respond to the questionnaire according to the instructions given in the tool. Pre-test was conducted on 08.10.2016 at 2.00pm - 3.00pm.

Step – II

On the same day, administration of IEC package to the selected school children. It lasts for 30 – 45 minutes.

Step – III

Post-test was administered after 7 days of administration of IEC package.

Intervention protocol

S.No.	Protocol	Study group
1.	**Place**	**Government Higher Secondary School, Medavakam.**
2.	**Intervention tool**	**IEC package**
3.	**Duration**	**30 - 45 minutes**
4.	**Time**	**2 pm – 3 pm**
5.	**Administered by**	**Investigator**
6.	**Recipient**	**60 selected school children**

3.17 Data entry and analysis

After the data collection data were entered in the coding sheet. The data analysis is planned on the basis of objectives and hypothesis of the study by using descriptive and inferential statistics.

Descriptive statistics

Frequency, percentage, mean and standard deviation were planned to be used for the analysis of pre-test and post-test assessment.

Inferential statistics

- Student independent "t" test is used to determine the association between demographic variables with level of knowledge.
- Categorical variables difference between pre test and post test was calculated by using Mc Nemars test.
- Paired 't' test is used to determine the difference between pre-test and post-test level of knowledge.
- Association between post test knowledge score with demographic variables are analyzed by using chi square test.
- Association between knowledge gain score with demographic variables are analyzed by using one way analysis of variance and student independent t - test

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the description of the sample, analysis and interpretation of data to assess the effectiveness of IEC package regarding disaster preparedness among 60 selected school children from Govt. High School, Medavakkam, Kanchipuram District. The obtained data have been classified, grouped and analysed statistically based on objectives of the study.

Organization of data

The collected data were tabulated and presented according to the objectives under the following sections:

Section - A: Frequency and percentage distribution of demographic information of school children those who are participated in the following study.

Section - B: Assessment of pre-test percentage of knowledge regarding disaster preparedness among selected school children at Medavakkam, Kanchipuram district

Section- C: Assessing the post test level of knowledge score regarding disaster preparedness among selected school children**,** after administration of IEC package.

Section -D: Effectiveness of IEC package by comparing pre test & post test level of knowledge on disaster preparedness.

Section -E: Association between the knowledge gain score with selected demographic variables.

SECTION - A

Table 4.2 Frequency and percentage distribution of demographic profile of selected school children

Demographic variables		No. of Children	%
Age	11 years	3	5.0%
	12 years	31	51.7%
	13 years	20	33.3%
	14 years	6	10.0%
Sex	Male	30	50.0%
	Female	30	50.0%
Studying class	6th Std	20	33.3%
	7th Std	20	33.3%
	8th Std	20	33.4%
Place of living	City	45	75.0%
	Village	15	25.0%
Family monthly income	≤ Rs.5000	14	23.3%
	Rs.5001 -15000	35	58.3%
	> Rs.15000	11	18.4%
Type of family system	Nuclear family	42	70.0%
	Joint family	18	30.0%
Language known	Tamil	50	83.3%
	Telugu	9	15.0%
	Hindi	1	1.7%
Total number of children in the family	One	19	31.7%
	Two	37	61.7%
	Three	2	3.3%
	Four	2	3.3%
Experience and previous knowledge about disaster preparedness	Yes	5	8.3%
	No	55	91.7%
Source of information	Television	18	30.0%
	Radio	13	21.7%
	News paper	19	31.6%
	Cell phone	10	16.7%

The following inferences were made,

Children 31 (51.7%) were in the age group of 12 years,3(5.0%) were in the age group of 11 years.

Both the sex 30 (50%) were in equal in respectively.

Studying standards of the children are 20 (33.45) equally distributed.

Most of the children are living in the city 45 (75%) and 15 (25%) of the children are living in the village.

Nearly 35 (58.3%) of the children's family monthly income were between Rs.5001 – 15000, 14 (23.3%) children's family monthly income was ≤ Rs.5000 and the 11 (18.4%) children's family monthly income was > Rs.15000.

Most of the children were come from 42 (70.0%) nuclear family and the 18) 30.0%) were from joint family.

Nearly 50 (83.3%) of the children were knowing Tamil, 9 (15%) of them are knowing Telugu, and only 1 (1.7%) known Hindi.

Most of the children were belongs to 37 (61.7%) two children in their family, 19 (31.7%) children belongs to one child in their family, only 2 (3.3%) children are having three and four children in their family respectively.

Most of the children had No 55 (91.%) experience and previous knowledge about disaster preparedness and only 5 (8.3%) of them had experience and previous knowledge about disaster preparedness.

Most of the children had information from News paper 19 (31.6%) and Television 18 (30.0%) respectively.

Section - B: Assessment of pre-test percentage of knowledge regarding disaster preparedness among selected school children.

Table 4.3 Pre test level of knowledge score

Level of knowledge	No. of children	%
Inadequate knowledge	60	100.0%
Moderate knowledge	0	0.0%
Adequate knowledge	0	0.0%
Total	60	100%

Table 4.3 shows that the pre test level of knowledge score regarding disaster preparedness among selected school children**,** before administration of **IEC package**. 100% of the school children are having inadequate knowledge score; none of them are having moderate level and adequate level of knowledge.

Section- C: Assessing the post test level of knowledge score regarding disaster preparedness among selected school children**,** after administration of IEC package.

Table 4.4 Post test level of knowledge score on disaster preparedness among selected school children

Level of knowledge	**No. of selected school children**	**%**
Inadequate knowledge	0	0.0%
Moderate knowledge	43	71.7%
Adequate knowledge	17	28.3%
Total	60	100%

Table 4.4 shows that the post-test level of knowledge score regarding disaster preparedness among selected school children are 71.7% of them are having moderate level of knowledge and 28.3% of them are having adequate level of knowledge.

Section -D: Effectiveness of IEC package by comparing pre test & post test level of knowledge on disaster preparedness.

Table 4 .5 Pre-test and post-test level of knowledge score.

	Level of knowledge				**Extended McNemar's test**
	Pre test		**Post test**		
	N	**%**	**N**	**%**	
Inadequate	60	100.0%	0	0.0%	**$\chi 2$=60.00 p=0.001*** DF= 2 significant**
Moderate	0	0.0%	43	71.7%	
Adequate	0	0.0%	17	28.3%	
TOTAL	60	100%	60	100%	

DF= Degrees of Freedom*** very high significant at P≤0.001

The data from table 4.5 revealed compare the pre test and post test level of knowledge score among school children regarding disaster preparedness before & after administration of IEC package.

In pre test, majority of the 60 (100.0%)of the selected school children are having inadequate knowledge score on disaster preparedness.

In post test, majority of the selected school children 43 (71.7%) of them are having moderate knowledge score and 17 (28.3%) of them are having adequate level of knowledge score respectively.

There was statistically significant difference between pre and post test knowledge score. It was confirmed using extended Mc Nemar's test, which shows the effectiveness of IEC package on disaster preparedness among selected school children.

Table 4.6 Mean, standard deviation & 't' value of the pre test and post test knowledge score on disaster preparedness among selected school children

Knowledge on	Knowledge score				Mean Difference	Student's paired t-test
	Pre test		Post test			
	Mean	SD	Mean	SD		
Meaning of disaster	.48	.54	1.43	.56	0.95	**t=8.84, P=0.001*** significant**
Regarding flood	1.52	1.14	5.08	1.08	3.56	**t=18.15, P=0.001*** significant**
Disaster preparedness on flood	.75	.75	2.35	.80	1.6	**t=10.01, P=0.001*** significant**
During flood	.87	.81	3.55	.96	2.68	**t=17.31, P=0.001*** significant**
After flood	.47	.57	1.37	.66	0.9	**t=7.94, P=0.001*** significant**
Future plans	.22	.42	.73	.45	0.51	**t=6.71, P=0.001*** significant**

*** high significant at P≤0.001

The above table reveals that comparison of pre test and post test knowledge score on each domains of disaster preparedness.

Mean difference and standard deviation of meaning of disaster preparedness in pre test and post test (M = 48, 1.43: SD = 54, 56) with the 't' value of 8.84, which was highly significant (P≤0.001). The mean difference and standard deviation of knowledge of flood on disaster preparedness in pre test and post test was (M = 1.52, 5.08: SD = 1.14, 1.08) with the 't' value of 18.15, which is highly significant (P≤0.001). The mean difference and standard deviation of knowledge preparedness on flood in pre test and post test was (M = 0.75, 2.35: SD = 0.81, 0.96) with the 't' value of 10.01, which is highly significant (P≤0.001). Considering the mean difference and standard deviation during flood preparedness in pre test and post test was (M = 0.87, 3.55: SD = 0.81, 0.96) with the 't' value of17.31, which is highly significant (P≤0.001). The mean difference and standard deviation of knowledge of after flood preparedness in pre test and post test was (M = 0.47, 1.37: SD = o.57, 0.66) with the 't' value of 7.94, which is highly significant (P≤0.001).Considering he mean difference and standard deviation of knowledge of future plan of flood preparedness in pre test and post test was (M = 0.22,0.73: SD = 0.42, 0.45) with the 't' value of 6.71, which is highly significant (P≤0.001).

Table 4.7: Comparison of overall pre and posttest knowledge score

	No. of children	Knowledge score Mean ± SD	Mean Difference	Student's paired t-test
Pre test	60	4.30± 1.74	10.22	**t=36.44 P=0.001*** DF=59 significant**
Post test	60	14.52±1.90		

DF= Degrees of Freedom *** very high significant at P≤0.001

Table 4.7 reveals that the mean difference and standard deviation of the pre test and post test knowledge score (M = 4.30: 14.52, SD = 1.74, 1.90) with the 't' value of 36.44, which is statistically significant with P≤0.001. This shows the effectiveness of the IEC package on disaster preparedness among selected school children.

Section -E: Association between the knowledge gain score with selected demographic variable **Table 4.8: Association between post test level of knowledge score demographic variables of the selected school children at Medavakkam, Kanchipuram District.**

Demographic variables		Post test level of knowledge score						Total	Chi square test
		Inadequate		Moderate		Adequate			
		N	%	N	%	N	%		
Age	11 years	0	0.0%	3	100.0%	0	0.0%	3	**χ2=9.14 P=0.03***
	12 years	0	0.0%	26	83.8%	5	16.2%	31	**DF=2 significant**
	13 years	0	0.0%	12	60.0%	8	40.0%	20	
	14 years	0	0.0%	3	50.0%	3	50.0%	6	
Sex	Male	0	0.0%	22	73.3%	8	26.7%	30	χ2=0.08 P=0.78
	Female	0	0.0%	21	70.0%	9	30.0%	30	
Now studying class	6th Std	0	0.0%	18	90.0%	2	10.0%	20	**χ2=6.07 P=0.05***
	7th Std	0	0.0%	14	70.0%	6	30.0%	20	**DF=2 significant**
	8th Std	0	0.0%	11	55.0%	9	45.0%	20	
Place of living	City	0	0.0%	29	64.4%	16	35.6%	45	**χ2=4.62 P=0.03***
	Village	0	0.0%	14	93.3%	1	6.7%	15	**DF=2 significant**
Family monthly income	≤ Rs.5000	0	0.0%	8	57.1%	6	42.9%	14	χ2=3.00 P=0.22
	Rs.5001 - 15000	0	0.0%	28	80.0%	7	20.0%	35	
	> Rs.15000	0	0.0%	7	63.6%	4	36.4%	11	
Type of family system	Nuclear family	0	0.0%	34	80.9%	8	19.1%	42	**χ2=5.94P=0.02***
	Joint family	0	0.0%	9	50.0%	9	50.0%	18	**DF=2 significant**
Language known	Tamil	0	0.0%	34	68.0%	16	32.0%	50	χ2=2.04 P=0.36
	Telugu	0	0.0%	8	88.9%	1	11.1%	9	DF=2
	Hindi	0	0.0%	1	100.0%			1	
Total number of children in the family	One	0	0.0%	15	78.9%	4	21.1%	19	χ2=1.46 P=0.69
	Two	0	0.0%	26	70.3%	11	29.7%	37	DF=2 Not
	Three	0	0.0%	1	50.0%	1	50.0%	2	significant
	Four	0	0.0%	1	50.0%	1	50.0%	2	
Experience and previous knowledge about disaster preparedness	Yes	0	0.0%	3	60.0%	2	40.0%	5	χ2=0.36 P=0.54
	No	0	0.0%	40	72.7%	15	27.3%	55	DF=2
Source of information	Television	0	0.0%	11	61.1%	7	38.9%	18	χ2=1.54 P=0.67
	Radio	0	0.0%	10	76.9%	3	23.1%	13	DF=2
	News paper	0	0.0%	14	73.7%	5	26.3%	19	
	Cell phone	0	0.0%	8	80.0%	2	20.0%	10	

It could be inferred from table 4.8 that there was significant association between the post test level of knowledge score with selected demographic variables of after administration of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram district.

Table 4.9: Association between children knowledge gain score and demographic variables of selected school children at Medavakkam. Kanchipuram District.

Demographic variables		N	Knowledge gain score						One way ANOVA F-test/t-test
			Pre test		Post test		Knowledge gain= post-pre		
			Mean	SD	Mean	SD	Mean	SD	
Age	11 years	3	4.67	2.08	13.70	1.73	9.03	1.53	
	12 years	31	4.29	1.64	13.56	1.50	9.27	1.87	**F=2.83P=0.05* Significant**
	13 years	20	4.25	2.07	14.75	1.90	10.50	2.46	
	14 years	6	4.33	1.21	15.93	3.06	11.60	2.59	
Sex	Male	30	4.47	1.81	14.67	1.73	10.20	2.04	t=0.06P=0.95
	Female	30	4.13	1.68	14.37	2.08	10.23	2.33	
Now studying class	6th Std	20	3.95	1.57	13.15	1.70	9.20	1.60	**F=3.18P=0.05* Significant**
	7th Std	20	3.95	1.61	14.30	1.75	10.35	2.23	
	8th Std	20	5.00	1.89	15.90	2.27	10.90	2.58	
Place of living	City	45	4.13	1.53	15.52	1.94	11.39	2.13	**t=2.13P=0.03* Significant**
	Village	15	4.80	2.24	14.80	1.82	10.00	2.36	
Family monthly income	≤ Rs.5000	14	4.71	2.27	14.79	2.04	10.07	2.70	F=0.50P=0.60
	Rs.5001 - 15000	35	4.14	1.50	14.23	1.66	10.09	1.98	
	> Rs.15000	11	4.27	1.79	15.09	2.39	10.82	2.14	
Type of family system	Nuclear family	42	4.33	1.82	13.48	1.97	9.14	2.19	**t=2.35P=0.02* Significant**
	Joint family	18	4.22	1.59	14.81	1.79	10.59	2.17	
Language known	Tamil	50	4.44	1.82	14.72	1.87	10.28	2.19	F=0.26P=0.76
	Telugu	9	3.67	1.12	13.44	1.88	9.78	2.28	
	Hindi	1	3.00	.	14.00	.	11.00	.	
Total number of children in the family	One	19	4.32	1.63	13.53	1.90	9.21	1.75	F=2.19P=0.10
	Two	37	4.16	1.59	14.89	1.59	10.73	2.05	
	Three	2	6.00	5.66	16.00	1.41	10.00	4.24	
	Four	2	5.00	.00	15.50	4.95	10.50	4.95	
Experience and previous knowledge about disaster preparedness	Yes	5	4.40	1.67	14.20	2.86	9.80	2.59	t=0.44P=0.66
	No	55	4.29	1.76	14.55	1.82	10.25	2.15	
Source of information	Television	18	4.22	1.73	14.89	2.00	10.67	2.30	F=0.75P=0.52
	Radio	13	4.15	1.41	14.69	1.75	10.54	1.94	
	News paper	19	4.26	1.94	14.16	1.92	9.89	2.21	
	Cell phone	10	4.70	1.95	14.30	2.00	9.60	2.22	

Not significant P> 0.05 * significant at P≤0.05

It could be inferred from table 4.9 that there was significant association between the post test level of knowledge score with selected demographic variables. The elder children 6 (F = 2.83, P=0.05), 8th standard studying children 20 (F =3.18, P=0.05), city residence children 45 (t=2.13, P= 0.03) those who are coming from joint family children 18 (t = 2.35, P=0.02) are gain more knowledge score than others on disaster preparedness among selected school children at Medavakkam, Kanchipuram district.

CHAPTER VI

DISCUSSION

This chapter deals with the discussion of the results of the data analyzed based on the objectives of the study and hypothesis. The purpose of the study is to assess effectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District.

Objective 1: To assess the level of knowledge regarding disaster preparedness in selected school children at Medavakkam, Kanchipuram District.

The data from the present study showed that the pre test level of knowledge score regarding disaster preparedness among selected school children**,** before administration of **IEC package**. 100% of the school children are having inadequate knowledge score; none of them are having moderate level and adequate level of knowledge.

The following study was supported **Vladimir M. Cvetković1, et al (2015)** quantitative research is to determine the perception and actual knowledge of secondary school students in the Belgrade region with respect to earthquakes as a natural disaster and security threat, and to identify the factors that influence their knowledge and perceptions. For the purpose of this research, a sample of 3,063 students was drawn from the total population of secondary school students in Belgrade (65,561 students), which equates to 4.67% of the population. The results show that the sources of information on natural disasters and their threatening consequences influence the perceptions of secondary school students. In view of the evident lack of education about natural disasters in Serbia, the results of this study can be used when creating a strategy for educational programs.

Objective 2 To assess the effectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District.

The present study shows that the post-test level of knowledge score regarding disaster preparedness among selected school children are 71.7% of them are having

moderate level of knowledge and 28.3% of them are having adequate level of knowledge.

The data revealed compare the pre test and post test level of knowledge score among school children regarding disaster preparedness before & after administration of IEC package.

In pre-test, majority of the 60 (100.0%) of the selected school children are having inadequate knowledge score on disaster preparedness.

In post-test, majority of the selected school children (71.7%) of them are having moderate knowledge score and (28.3%) of them are having adequate level of knowledge score respectively.

There was statistically significant difference between pre and post test knowledge score. It was confirmed using extended Mc Nemar's test, which shows the effectiveness of IEC package on disaster preparedness among selected school children.

The study revealed that the comparison of pre test and post test knowledge score on each domains of disaster preparedness.

Mean difference and standard deviation of introduction of disaster preparedness in pre test and post test (M = 48, 1.43: SD = 54, 56) with the 't' value of 8.84, which was highly significant (P≤0.001). The mean difference and standard deviation of knowledge of flood on disaster preparedness in pre test and post test was (M = 1.52, 5.08: SD = 1.14, 1.08) with the 't' value of 18.15, which is highly significant (P≤0.001). The mean difference and standard deviation of knowledge preparedness on flood in pre test and post test was (M = 0.75, 2.35: SD = 0.81, 0.96) with the't' value of 10.01, which is highly significant (P≤0.001). Considering the mean difference and standard deviation during flood preparedness in pre-test and post-test was (M = 0.87, 3.55: SD = 0.81, 0.96) with the't' value of17.31, which is highly significant (P≤0.001). The mean difference and standard deviation of knowledge of after flood preparedness in pre test and post test was (M = 0.47, 1.37: SD = o.57, 0.66) with the 't' value of 7.94, which is highly significant (P≤0.001).Considering he mean

difference and standard deviation of knowledge of future plan of flood preparedness in pre test and post test was (M = 0.22,0.73: SD = 0.42, 0.45) with the 't' value of 6.71, which is highly significant (P≤0.001)..

The present study was supported by **Hellen Mamosegare Mamogale (2011) conducted** study was to determine the extent to which disaster preparedness was achieved by learners and educators in schools located in Soshanguve North by sourcing data from principals, educators, learners and school safety committees. The research methodology used in this study to solicit views of school principals, teachers, learners and school safety representatives was a mixed research approach where data was obtained through questionnaires and interviews. The sample of research population comprised of ten schools, five primary schools and five secondary schools around Soshanguve North, Tshwane District. Fifty participants filled out questionnaires, and ten participants responded to interviews. Data collected was computed by means of excel spreadsheet and results were presented in the form of pie and bar graphs with narrative explanations. It showed that educators were not trained in disaster management. The surprising finding of the study was that learners tended to be the ones who were aware of disaster preparedness in this study when their knowledge about hazards and disasters acquired at school was assessed.

Objective 3

To find out the association between the post-test level of knowledge with selected demographic variables of selected school children at Medavakkam, Kanchipuram District.

It could be inferred from that there was no significant association between the pre test levels of knowledge with selected demographic variables on disaster preparedness among selected school children at Medavakkam, Kanchipuram district.

It could be inferred from that there was significant association between the post test levels of knowledge score with selected demographic variables of after administration of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram district.

The results of the present study was supported by A study was conducted to assess the knowledge, attitude and behaviours regarding disaster management among 135 post graduate (PG) students in a private dental institution in Dharwad, India. A cross sectional design was used. The result of the study show that PG students 125 (92.59%) participants responded in the study. Mean knowledge (58.74), attitude (85.78) and behaviours (31.60) scores were identified. Significant correlations were observed between knowledge and year of study (a^2=45.301,p=0.000), and behaviours and place of residence of respondents ((a^2=4.112,p=0.043). The study concluded that the participants had low knowledge and behaviours scores, but high attitude scores regarding disaster management. The year of study and the place of residence were associated with knowledge and behaviour. This study suggests the need for curriculum changes in dental education and has policy implications for disaster management in India.

Hypothesis

Ho1- There will be no significant difference between pre-test and post-test level of knowledge on disaster preparedness among selected school children at Medavakkam, Kanchipuram District.

The statistical analysis reveals that the mean difference and standard deviation of the pre test and post test knowledge score (M = 4.30: 14.52, SD = 1.74, 1.90) with the 't' value of 36.44, which is statistically significant with P≤0.001. Hence the Ho1 was **rejected.**

Ho2- There will be no significant association between the post-test level of knowledge with selected demographic variables of selected school children at Medavakkam, Kanchipuram District.

It could be inferred that there was significant association between the post test level of knowledge score with selected demographic variables. The elder children 6 (F = 2.83, p=0.05), 8th standard studying children 20 (F = 3.18, p= 0.05), city residence children 45 (t = 2.13, p=0.03) those who are coming from joint family children 18 (t= 2.35, p=0.05) are gain more knowledge score than others on disaster preparedness. Hence the Ho2 was **rejected.**

CHAPTER V

SUMMARY OF STUDY FINDINGS

The study was done to determine the effectiveness of IEC package on disaster preparedness among selected school children.

5.1 Based on demographic findings of the selected school children:

The following inferences were made.

Children 31 (51.7%) were in the age group of 12 years,3(5.0%) were in the age group of 11 years.

Both the sex 30 (50%) were in equal in respectively.

Studying standards of the children are 20 (33.45) equally distributed.

Most of the children are living in the **city** 45 (75%) and 15 (25%) of he children are living in the village.

Nearly 35 (58.3%) of the children's family monthly income were between Rs.5001 – 15000, 14 (23.3%) children's family monthly income was ≤ Rs.5000 and the 11 (18.4%) children's family monthly income was > Rs.15000.

Most of the children were come from 42 (70.0%) nuclear family and the 18) 30.0%) were from joint family.

Nearly 50 (83.3%) of the children were knowing Tamil, 9 (15%) of them are knowing Telugu, and only 1 (1.7%) Known Hindi.

Most of the children were belongs to 37 (61.7%) two children in their family, 19 (31.7%) children belongs to one child in their family, only 2 (3.3%) children are having three and four children in their family respectively.

Most of the children had No 55 (91.%) experience and previous knowledge about disaster preparedness and only 5 (8.3%) of them had experience and previous knowledge about disaster preparedness.

Most of the children had information from News paper 19 (31.6%) and Television 18 (30.0%) respectively.

5.2 Based on assessment of pre-test and post test knowledge score regarding disaster preparedness among selected school children.

- With regard to the pre test level of knowledge score regarding disaster preparedness among selected school children**,** before administration of **IEC package**. 100% of the school children are having inadequate knowledge score, none of them are having moderate level and adequate level of knowledge score.
- Domain wise pre-test percentage of knowledge score regarding disaster preparedness among selected school children. They are having more score in **Disaster preparedness on flood** (25.0%) and minimum score in **During flood** (17.4%). Overall they are having 21.5% of score.
- Regarding post test level of knowledge score regarding disaster preparedness among selected school children**,** after administration of **IEC package**. none of the school children are having inadequate knowledge score, 71.7% of them are having moderate knowledge score 28.3% of them are having adequate level of knowledge score
- Domain wise pre-test percentage of knowledge regarding disaster preparedness among selected school children. They are having more score in **Disaster preparedness on flood** (78.3%) and minimum score in **After flood** (68.5%). Overall they are having 72.6% of score.

5.3 Based on comparison of mean scores between pre test and post test knowledge scores of women regarding regarding disaster preparedness among selected school children.

- Considering **meaning of disaster** aspects, in pre test, children are having 0.48 score where as in post test they are having 1.43 score , so the difference is 0.95. This difference between pre test and post test is large and it is statistically significant.

- Considering knowledge on **Regarding flood** aspects ,in pre test , children are having 1.52 score where as in post test they are having 5.08 score , so the

difference is 3.56 This difference between pre test and post test is large and it is statistically significant.

- Considering knowledge on **Disaster preparedness on flood** aspects, in pre-test, children are having 0.75 score where as in post test they are having 2.35 score, so the difference is 1.60. This difference between pre test and post test is large and it is statistically significant.

- Considering knowledge on **During flood** aspects, in pre test, children are having 0.87 score where as in post test they are having 3.55 score, so the difference is 2.68. This difference between pre test and post test is large and it is statistically significant.
- Considering knowledge on **After flood** aspects, in pre test, children are having 0.47 score where as in post test they are having 1.37 score , so the difference is 0.90. This difference between pre test and post test is large and it is statistically significant.
- Considering knowledge on **Future plans** aspects, in pre test, children are having 0.22 score where as in post test they are having 0.73 score , so the difference is 0.51. This difference between pre test and post test is large and it is statistically significant.
- Considering overall knowledge score, in pre test, children are having 4.30 score whereas in post test they are having 14.52 score, so the difference is 10.22.
- The difference between the pre test and post test score is large and it is statistically significant.

5.4. Findings based on effectiveness of IEC package on disaster preparedness among selected school children.

On an average, children are **gained** 51.1% of knowledge score after administration of *IEC package*. Differences between pre test and post test score was analysed using mean difference with 95% confidence interval and proportion with 95% Confidence interval. This 46.6% knowledge gain score shows the **effectiveness** of *IEC package* on disaster preparedness among selected school children.

5.5. Findings based on association between post test knowledge score with selected demographic variables

The study showed that the association between post test level of knowledge score of children with demographic variables. Elder children, More class studying children, city residence children and joint family children had gained more knowledge than others after administration of IEC package.

CHAPTER VII

CONCLUSION AND RECOMMENDATIONS

The present study assessed the effectiveness of IEC package on disaster preparedness among selected school children at Medavakkam, Kanchipuram District. This chapter deals with limitations, implications, limitationsand recommendations. The findings of the study have the following implications in the areas of Nursing service, nursing education, nursing administration and nursing Research.

7.1. Implications

The findings of the study show the effectiveness of IEC package on disaster preparedness among selected school children. The findings of the has several implication on the following headings.

7.1.1. Nursing practice:

The findings of the study clearly enlighten the effectiveness of IEC package on disaster preparedness among selected school children and had significantly improved the knowledge of the participants and helps them to lead a healthy and peaceful living. This shows that the health care provider plays a vital role in educating selected school children about disaster preparedness and its importance.

7.1.2. Nursing education

The study had proved that improved knowledge on disaster preparedness among selected school children could change their attitude and behavior towards disaster preparedness .The nurse should be equipped with up-to-date knowledge on disaster preparedness, so that they can be impart appropriate knowledge. The nursing students must be encouraged to actively participate in educating about the disaster preparedness by using appropriate disaster drills and audio visual aids with appropriate teaching methods.

7.1.3. Nursing administration

With technological advances and the ever growing challenges of health care emphasis, the nurse administrators must have a responsibility to provide nurses with

substantive continuing nursing education opportunities. This will enable the nurses to update their knowledge, acquire special skills and demonstrate high quality care. Nurse administrators should initiate in organizing the continuing nursing education programmes on IEC package and its effectiveness on disaster preparedness for the selected school children and community settings. Nursing administrators should take adequate steps in formulating protocol and policies in providing client education and plans for manpower, money and material methods and time to conduct successful and useful educational programmes.

7.1.4. Nursing research

This is a need for extensive and intensive research in this area. It opens a big avenue for research on disaster preparedness IEC package , increasing the level of knowledge so as to generate more scientific data base on which new strategies could be developed. The study can be base line for the future research to build upon. The research also brings about the fact that more studies need to be done at different settings which is culturally acceptable with better teaching strategies of education. Nurses should conduct periodic education programmes to review the research findings and disseminate the findings through conferences, seminars and publication in professional, National and International journals and in the web site also.

7.2 Limitations

The study was limited to selected school children, the study was confined to a small number respondents and shorter period that limits the generalization.

7.3 Recommendations

1) The same study could be conducted on a large sample to generalize the results.
2) The study could be replicated in different settings with similar facilities.
3) Same study will be conducted in any age group.
4) The comparative study could be conducted in urban and rural population.
5) This study can conducted those who are living in low lying areas, sea shore areas and river bank areas.

Conclusion

Disaster preparedness is one of the major challenging problem among every individual in the community in India as well as the global. Nursing personnel should educate the individual, so that the quality of life will be improved. The interaction was found to be very effective in prevention of impacts of Disaster.

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DEMOGRAPHIC VARIABLE PROFILE

PURPOSE:

This proforma is used to assess the demographic variables of selected school children such as age, sex, educational status, place f living, monthly income, type of family, language known, number of children in the family, previous experience about disaster preparedness about flood and source of information

INSTRUCTION:

The researcher collects the following information from the participants by asking question in the interview form. Please be frank and free in answering the following questions. It will be kept confidential and anonymity will be maintained.

Sample No.----------

1.Age in years

1.1 11 – 12 years ☐

1.2 12 -13 years ☐

1.3 13-14 years ☐

2. Sex

2.1 Male ☐

2.2 Female ☐

3. Now studying

3.1 6^{th} standard ☐

3.2 7^{th} standard ☐

3.3 8^{th} standard ☐

4. Place of living

4.1 Urban ☐

4.2 Village ☐

5. Family Income (Rupees)

5.1 Rs. ≤ 5000/- ☐

5.2 Rs ≤5001 – 15000/- ☐

5.3 Rs ≥15000/- ☐

6. Type of family

6.1 Nuclear family ☐

6.2 Joint family ☐

6.3 Extended family

7. Language known

7.1 Tamil ☐

7.2 English ☐

7.3 Telugu ☐

7.4 Hindi ☐

8. Total number of children in the family

8.1 1 ☐

8.2 2 ☐

8.3 3 ☐

8.4 4 ☐

9. Experience and previous knowledge about disaster preparedness

9.1 Yes ☐

9.2 No ☐

10. Source of information

10.1 Television ☐

10.2 Radio ☐

10.3 News paper ☐

10.4 Cell phone ☐

QUESTIONNAIRE TO ASSESS THE KNOWLEDGE REGARDING DISASTER PREPAREDNESS ON FLOOD AMONG SELECTED SCHOOL CHILDREN AT MEDAVAKKAM, KANCHIPURAM DISTRICT.

PURPOSE:

This self-administered structured knowledge questionnaire is used to assess the level of knowledge regarding disaster preparedness on flood among selected school children.

INSTRUCTION:

Please read the question given below. Each question has three choices, select the appropriate choice and put √ of correct answer in the space provided.

The collected information will be confidential and will be used for the research purpose only.

Sample No. ----------

INTRODUCTORY QUESTIONS

1) **What are the changes happens during disaster?**

   a) Structural, Economic, Organizational damage ☐

   b) Clearance job opportunity alone ☐

   c) Change the money value alone ☐

2) **Which one is the natural disaster?**

   a) Flood ☐

   b) Bio-terrerism ☐

   c) Hybrid disasters ☐

3) When does the Flood occurs?

a) Water flows, Rises above the level ☐

b) Decreases its level in ponds and pools ☐

c) Within its normal limit ☐

4) What causes flood?

a) Continuous heavy rain ☐

b) Good drainage system ☐

c) Broadness of the river ☐

5) Which type of flood in Chennai we met recently ?

a) Reverine flood ☐

b) Coastal flood ☐

c) Urban flood ☐

6) what causes Urban flood ?

a) Melting of snow ☐

b) Dam burst ☐

c) Lack of proper drainage system ☐

7) How much impacts accounts for global death count due to flood in India?

a) One fifth

b) Three fifth ☐

c) Two fifth ☐

8) Which basins are the most flood prone areas in India ?

a) Gangatic and Bramhaputhra ☐

b) Cauvery and Yamuna ☐

c) Saraswathy and Godavari ☐

9) What are the Ill effects of flood ?

a) Physical damage, Destruction of crops & shortage of food supplies ☐

b) Chemical damage and effects ☐

c) Promotes plant growth and economic status ☐

Disaster preparedness on before flood

10) What are the items should the emergency kit contains?

a) Medicines, Water & Food materials, Torch light ☐

b) Vegetables, soft drinks, cool drinks ☐

c) Cement, chemicals, disinfectants ☐

11) What is kept ready for the following?

a) First aid kit with extra medications ☐

b) Cold water, dry food ☐

c) Clothing & soil water ☐

During flood

12) What are the measures to be followed when you heard **" flood warning"** ?

a) Check the emergency kit, ☐

b) Keep the electrical items in "on" ☐

c) Lighting the gas stove and cook ☐

13) Which water is used to drink during flood?

a) Cold water ☐

b) Boiled water ☐

c) Flood water ☐

14) What is used to disinfect the surroundings during floody days?

a) Flooded water ☐

b) Soil water with soap ☐

c) Bleaching powder and lime ☐

15) What is to be done, If you have diarrhoea during flood ?

a) Flood water ☐

b) Rice water and boiled water ☐

c) Tender coconut water ☐

16) What type of food items should be used during flood?

a) Dry food items ☐

b) Opened food items ☐

c) Eat heavy meals ☐

17) What is the danger occurred commonly during flood?

a) Snake bites ☐

b) Scorpion bites ☐

c) Insect bite ☐

After flood

18) What is to be checked before entering in to the flooded building?

a) Check for safety before entering ☐

b) Directly enter still flooded/surrounded by flood water ☐

c) Not check the structural damage ☐

19) What is the "**Extreme Caution"**?

a) Wear safety shoes, Check for gas and electrical leaks ☐

b) Use battery powered lighting ☐

c) Not above two ☐

Future plans

20) How will you protect your property from future flood damage?

a) Follow local building codes ☐

b) Use soiled drinking water ☐

c) Not consider elevation of the local structure ☐

A STUDY TO ASSESS THE EFFECTIVENESS OF IEC PACKAGE ON DISASTER PREPAREDNESS AMONG SELECTED SCHOOL CHILDREN A

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S. No.	Age	F	EDUCATION	POL	INC	TOF	LANG	TNC	PREV EX	Information through		Q1
1	14	F	8 th	city	Rs ≤ 5000/-	Joint family	Tamil	4	No	Television		2
2	13	F	8 th	Viilage	Rs ≤ 5000/-	Nuclear family	Tamil	3	No	News paper		3
3	14	M	8 th	Viilage	Rs ≥ 15000/-	Nuclear family	Tamil	2	No	Radio		1
4	13	M	8 th	Viilage	Rs 5001-15000	Joint family	Tamil	2	No	Television		3
5	13	M	8 th	Viilage	Rs 5001-15000	Nuclear family	Tamil	2	No	Radio		3
6	14	M	8 th	city	Rs ≤ 5000/-	Nuclear family	Telugu	1	No	News paper		2
7	14	F	8 th	city	Rs 5001-15000	Joint family	Tamil	2	No	Radio		3
8	14	F	8 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	2	No	Television		2
9	13	F	8 th	city	Rs 5001-15000	Nuclear family	Tamil	1	No	News paper		3
10	13	M	8 th	Viilage	Rs ≤ 5000/-	Nuclear family	Tamil	2	No	Radio		3
11	13	F	8 th	city	Rs 5001-15000	Nuclear family	Tamil	2	Yes	Television		2
12	12	F	8 th	city	Rs 5001-15000	Joint family	Tamil	2	No	News paper		1
13	12	F	8 th	Viilage	Rs 5001-15000	Nuclear family	Telugu	2	No	Television		3
14	12	M	8 th	city	Rs ≤ 5000/-	Nuclear family	Tamil	2	No	Cell Phone		1
15	13	M	8 th	Viilage	Rs 5001-15000	Nuclear family	Tamil	2	No	Radio		3
16	12	M	8 th	city	Rs 5001-15000	Joint family	Tamil	2	No	Television		1
17	13	M	8 th	Viilage	Rs ≥ 15000/-	Nuclear family	Telugu	1	No	News paper		2
18	13	F	8 th	city	Rs 5001-15000	Nuclear family	Tamil	1	Yes	News paper		3
19	13	F	8 th	city	Rs 5001-15000	Nuclear family	Telugu	2	No	Cell Phone		1
20	13	F	8th	Viilage	Rs ≤ 5000/-	Joint family	Tamil	2	No	Television		3
21	14	M	7 th	city	Rs 5001-15000	Nuclear family	Telugu	2	No	News paper		3
22	12	F	7 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	2	No	Cell Phone		2
23	13	F	7 th	city	Rs 5001-15000	Joint family	Tamil	2	No	Television		1
24	13	F	7 th	city	Rs 5001-15000	Nuclear family	Tamil	3	No	News paper		3
25	12	M	7 th	Viilage	Rs ≤ 5000/-	Nuclear family	Tamil	1	No	Television		2
26	12	M	7 th	city	Rs 5001-15000	Nuclear family	Tamil	1	No	News paper		3
27	12	M	7 th	city	Rs 5001-15000	Joint family	Tamil	1	No	Cell Phone		1
28	12	M	7 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	News paper		2
29	13	M	7 th	city	Rs ≤ 5000/-	Nuclear family	Tamil	2	No	Television		3

30	12	M	7 th	Viilage	Rs 5001-15000	Joint family	Tamil	2	No	Radio		1
31	12	F	7 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	News paper		3
32	13	F	7 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	Television		3
33	12	F	7 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	1	No	Radio		3
34	12	M	7 th	city	Rs 5001-15000	Joint family	Telugu	1	No	Cell Phone		1
35	13	F	7 th	Viilage	Rs ≤ 5000/-	Nuclear family	Tamil	1	No	Television		3
36	13	F	7 th	city	Rs 5001-15000	Nuclear family	Tamil	1	Yes	News paper		2
37	12	M	7 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	1	No	Cell Phone		1
38	13	F	7 th	city	Rs 5001-15000	Joint family	Tamil	1	No	Television		3
39	12	M	7 th	city	Rs 5001-15000	Nuclear family	Tamil	1	No	News paper		1
40	13	F	7 th	city	Rs ≤ 5000/-	Nuclear family	Telugu	2	No	Radio		3
41	12	F	6 th	city	Rs 5001-15000	Joint family	Tamil	2	Yes	News paper		2
42	13	M	6 th	city	Rs ≥ 15000/-	Nuclear family	Telugu	2	No	Television		1
43	12	M	6 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	News paper		3
44	12	F	6 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	Cell Phone		1
45	12	M	6 th	Viilage	Rs ≤ 5000/-	Joint family	Tamil	2	No	Radio		3
46	12	M	6 th	city	Rs 5001-15000	Nuclear family	Telugu	1	No	Television		2
47	12	M	6 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	2	Yes	Cell Phone		1
48	11	F	6 th	city	Rs 5001-15000	Joint family	Hindi	2	No	Radio		3
49	12	M	6 th	city	Rs ≤ 5000/-	Nuclear family	Tamil	1	No	Television		2
50	12	F	6 th	city	Rs 5001-15000	Nuclear family	Tamil	1	No	News paper		1
51	12	F	6 th	Viilage	Rs ≥ 15000/-	Joint family	Tamil	2	No	Cell Phone		3
52	12	F	6 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	News paper		2
53	12	M	6 th	city	Rs ≤ 5000/-	Nuclear family	Tamil	2	No	Radio		3
54	12	F	6 th	city	Rs 5001-15000	Joint family	Tamil	2	No	News paper		1
55	12	F	6 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	Television		2
56	11	F	6 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	2	No	News paper		1
57	12	M	6 th	Viilage	Rs 5001-15000	Joint family	Tamil	2	No	Radio		3
58	11	M	6 th	city	Rs 5001-15000	Nuclear family	Tamil	1	No	Cell Phone		2
59	12	M	6 th	city	Rs ≤ 5000/-	Joint family	Tamil	1	No	Television		3
60	12	M	6 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	2	No	Radio		1

AT MEDAVAKKAM, KANCEEPURAM DISTRICT

ennai.

PRE TEST SCORE

Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	MARKS (20)	%	Q1	Q2	Q3	Q4	Q5
2	2	3	1	1	2	2	1	1	1	1	1	3	1	3	2	2	2	2			2	1	1	1	3
1	3	1	3	2	2	1	2	1	1	1	3	3	2	1	3	3	3	3			1	1	1	1	3
3	2	1	1	1	3	2	3	2	2	2	1	1	3	1	3	2	2	2			2	1	1	1	3
2	3	3	3	3	2	3	1	1	1	3	2	3	1	3	2	3	1	1			1	1	1	1	2
3	3	1	2	2	1	1	2	1	3	3	2	1	2	1	3	3	3	3			2	2	1	1	3
2	2	3	1	1	3	2	3	2	2	1	1	3	2	1	2	2	2	2			1	2	1	1	2
2	3	3	3	2	2	1	3	1	3	1	2	1	1	3	3	3	3	3			2	1	1	3	3
3	2	1	3	2	3	3	1	3	3	2	2	2	2	1	3	1	3	1			1	2	1	1	3
2	3	3	1	1	3	3	3	2	2	3	1	2	3	3	2	3	2	3			1	2	1	1	3
3	2	1	1	2	2	3	2	1	3	3	2	1	1	1	3	2	3	2			1	1	1	2	3
1	3	3	2	2	3	3	3	1	3	2	2	2	2	1	3	3	3	3			1	2	1	1	3
2	3	1	3	1	3	2	1	2	2	3	1	2	2	3	3	1	2	1			1	2	1	1	1
3	3	3	1	2	2	3	3	3	3	2	2	2	1	2	2	3	1	2			1	1	1	1	1
2	2	1	3	1	3	1	2	2	1	3	3	1	3	1	3	2	3	3			2	2	1	1	3
1	3	1	2	2	2	2	3	2	3	2	2	2	3	3	3	3	2	3			1	2	1	1	2
3	3	3	1	1	3	3	1	1	2	3	1	1	3	2	1	3	3	2			2	1	1	1	2
2	2	1	2	2	2	3	3	3	3	3	2	2	3	1	3	3	3	3			1	2	1	1	3
3	3	3	3	2	1	2	1	3	3	2	3	3	3	3	2	2	2	3			1	1	1	1	1
2	3	3	3	2	2	3	3	2	2	3	2	1	1	1	3	1	3	2			1	2	1	2	3
3	3	3	2	3	3	1	3	3	3	2	2	2	3	1	3	3	3	1			1	1	1	2	3
1	2	1	3	1	3	2	2	2	3	3	2	1	1	3	3	3	2	3			2	1	1	1	3
2	1	3	2	2	2	1	3	3	2	3	1	2	3	1	2	2	1	2			2	1	1	1	3
3	2	1	1	3	3	3	2	3	3	2	2	1	1	1	1	3	3	2			1	1	2	1	3
2	2	3	3	1	3	2	3	2	1	3	2	2	3	3	3	3	2	3			2	1	2	1	3
1	3	1	3	1	2	3	1	3	3	1	1	3	1	2	2	3	3	3			2	1	1	1	3
2	2	3	2	2	3	2	2	1	2	2	2	2	3	1	3	2	3	1			1	2	3	1	3
3	3	2	1	2	3	3	3	2	1	1	3	1	1	3	3	3	2	3			2	1	2	1	3
3	1	1	3	2	2	1	2	3	3	3	2	2	2	1	2	1	3	3			2	1	1	1	3
2	2	3	1	3	3	2	1	3	2	2	1	2	3	1	1	3	2	2			1	2	1	1	3

3	3	2	2	1	3	3	3	2	3	3	2	1	1	3	3	2	1	3			2	1	1	1	3
2	3	1	1	2	2	1	2	1	3	2	2	2	3	1	2	3	3	3			1	1	1	2	3
3	2	3	2	2	3	2	1	3	2	3	1	2	3	1	3	1	2	3			1	1	1	1	3
2	3	2	3	2	1	3	3	3	1	2	2	1	1	3	3	3	3	2			2	1	2	1	3
3	2	3	3	2	3	3	3	3	3	1	2	2	3	2	2	3	2	1			1	2	1	1	3
3	3	2	1	1	2	2	2	3	2	2	3	3	3	1	3	2	3	3			2	1	1	1	1
2	3	3	2	2	3	3	3	2	1	1	2	2	1	3	2	1	3	2			1	2	1	2	3
3	2	2	3	3	2	2	2	1	3	2	3	1	2	1	1	2	2	3			1	2	1	3	3
2	3	1	1	3	2	3	1	3	2	3	2	2	3	1	3	3	1	1			1	1	1	1	3
3	3	2	3	1	3	2	3	2	3	3	1	2	1	3	2	2	2	3			1	1	1	3	2
2	3	3	2	3	2	1	3	1	2	2	2	1	3	2	1	3	3	2			1	1	1	1	3
3	2	2	1	2	3	3	2	3	2	3	2	2	3	1	3	3	2	1			2	1	1	3	3
2	2	2	2	1	2	2	3	2	3	3	1	1	1	3	2	1	3	3			1	2	2	1	3
3	2	3	2	3	3	3	3	1	3	2	2	2	2	1	3	3	2	3			2	1	1	1	3
2	2	2	1	2	2	3	2	1	2	3	2	1	3	1	3	2	1	2			1	2	1	1	3
1	3	3	2	2	2	2	3	1	3	2	3	3	1	3	2	3	3	1			2	1	1	1	3
2	3	2	1	1	3	3	2	3	3	1	2	2	3	1	1	1	2	3			1	1	2	1	3
1	2	2	3	3	2	1	3	2	1	3	1	1	2	1	3	2	3	2			2	1	1	1	3
2	3	3	2	2	2	2	2	1	3	2	2	2	3	3	2	1	1	3			1	1	1	1	3
3	3	2	3	2	1	3	1	3	2	3	2	1	1	1	3	3	3	3			2	1	1	1	3
2	2	2	1	3	3	2	3	1	3	2	1	2	3	1	3	2	2	3			1	2	1	1	1
2	3	3	2	3	3	2	2	2	1	3	2	1	3	3	2	2	3	3			2	1	2	1	2
3	2	1	3	1	2	3	1	3	2	2	3	2	1	1	3	2	3	3			1	1	1	3	2
2	3	1	3	3	1	2	3	2	3	3	2	1	2	2	3	1	2	2			1	1	1	2	1
3	3	2	1	1	2	1	2	3	2	2	1	1	3	1	2	3	1	1			1	1	1	2	1
2	2	3	3	3	3	3	3	2	1	1	3	2	3	3	3	2	3	3			1	1	2	1	2
3	3	1	2	2	2	2	2	1	3	3	2	2	1	2	3	2	2	2			1	1	1	2	2
2	1	2	2	1	2	1	1	2	3	3	1	1	2	1	2	3	3	3			1	2	2	1	3
1	3	3	2	3	3	3	3	3	2	2	3	3	3	3	1	1	1	3			1	1	1	2	3
3	2	1	1	2	3	2	2	2	3	3	3	2	1	1	3	2	3	2			1	1	1	3	3
3	3	3	2	1	2	3	3	2	2	2	1	1	3	3	2	3	2	3			2	1	1	1	3

POST TEST SCORE

Q6	Q7	Q8	1	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	MARKS	%
3	1	1	1	1	1	1	3	3	2	2	1	1	1	1		
3	1	1	2	2	2	1	3	3	2	2	1	1	1	1		
3	1	1	1	1	1	2	3	3	2	2	1	1	1	1		
3	1	1	1	1	2	1	3	3	1	2	1	1	1	2		
1	1	1	1	1	2	1	3	3	2	2	1	1	3	2		
3	2	2	2	2	1	1	1	1	1	3	3	2	3	2		
1	1	2	1	2	1	1	3	1	2	1	2	2	3	1		
3	1	2	3	1	1	1	3	3	2	2	1	1	1	1		
1	2	3	1	1	1	2	3	3	2	2	1	1	1	1		
3	1	1	1	1	3	2	1	3	2	1	1	2	2	1		
3	1	1	3	1	1	1	3	3	3	2	1	1	2	1		
3	2	1	1	1	1	1	3	3	1	2	1	1	2	2		
3	1	1	2	1	1	1	3	1	3	2	3	3	1	2		
3	1	2	1	2	1	1	1	1	2	2	3	3	1	1		
3	1	2	2	1	1	1	1	3	2	2	1	1	1	1		
1	1	3	1	1	3	2	3	3	2	2	1	3	1	1		
2	1	1	1	2	1	2	1	1	2	2	1	1	3	2		
3	1	1	3	1	2	3	3	1	3	2	1	2	3	2		
3	1	2	1	1	1	1	3	1	3	1	1	1	1	1		
3	1	2	1	1	2	1	3	3	2	2	1	2	1	1		
3	1	1	1	2	1	1	3	3	2	1	1	3	2	1		
2	2	1	2	1	1	1	1	3	3	1	1	1	3	1		
2	2	1	2	2	1	1	3	2	2	1	1	1	1	3		
3	1	1	1	1	1	1	1	2	2	2	1	3	1	3		
3	2	1	1	1	1	2	3	3	3	2	1	1	1	1		
3	1	2	1	1	1	1	1	3	2	3	1	1	1	1		
2	1	1	1	2	1	1	3	3	2	1	1	3	1	1		
2	1	1	3	1	1	2	3	2	2	2	1	2	3	1		
2	1	1	1	1	1	1	3	2	2	2	1	1	3	1		

3	1	2	1	2	1	1	2	3	1	2	1	2	1	3		
3	2	2	1	1	2	1	2	3	2	2	1	1	1	3		
3	1	2	3	1	3	1	3	3	2	2	3	2	1	1		
3	1	3	1	1	2	2	3	2	2	3	1	1	2	1		
1	3	2	1	1	1	1	2	2	2	1	1	2	2	1		
1	3	3	1	2	2	2	3	3	2	2	1	1	1	1		
1	1	3	1	1	2	1	3	2	1	2	3	1	1	3		
3	1	3	1	2	1	2	2	3	2	2	2	1	1	1		
3	1	1	2	2	1	2	3	3	2	3	1	3	3	1		
3	3	1	3	1	1	1	3	2	2	3	1	1	2	1		
3	1	1	1	1	2	1	3	3	3	2	2	3	1	1		
2	1	1	1	1	1	1	1	3	1	2	1	1	1	3		
3	1	1	2	3	1	2	1	2	2	1	2	3	1	1		
3	3	1	2	2	1	3	3	3	2	2	1	1	2	1		
3	1	3	1	1	1	1	3	3	3	1	2	3	2	1		
3	1	2	1	1	1	3	1	2	3	2	2	1	1	1		
2	1	1	1	1	2	2	1	2	2	1	1	3	1	1		
3	1	1	1	1	1	1	3	3	2	2	1	1	3	1		
3	2	1	1	1	2	1	3	3	3	2	3	2	3	3		
3	3	1	2	1	2	2	3	3	2	3	1	1	1	2		
2	1	1	1	2	2	1	3	1	2	1	1	2	1	2		
3	1	1	2	1	1	1	3	1	2	2	3	1	1	1		
3	1	2	1	1	1	1	3	3	3	3	1	1	3	1		
3	1	1	2	3	1	1	1	3	3	2	1	1	1	1		
2	1	2	1	1	1	1	3	3	2	2	1	1	1	1		
3	1	1	2	1	2	1	3	3	2	1	3	1	1	1		
3	1	1	1	1	2	1	3	3	2	1	1	1	2	1		
3	2	1	1	1	1	1	1	3	1	2	1	1	1	2		
3	2	1	1	1	1	1	2	3	2	2	1	1	1	1		
3	1	1	1	1	1	2	3	1	2	1	2	3	1	1		
1	1	1	1	1	1	1	3	3	1	2	1	2	2	1		

A STUDY TO ASSESS THE EFFECTIVENESS OF IEC PACKAGE ON DISASTER PREPAREDNESS AMONG SELECTED SCHOOL CHILDREN AT MEDAVAKKAM, KANCEEPURAM DISTRICT

A.Sasikala M.Sc., (N) Second Year Student, College of Nursing, MMC, Chennai.

S. No.	Age	F	EDUCATION	POL	INC	TOF	LANG	TNC	PREV EX	Information through
1	14	F	8 th	city	Rs ≤ 5000/-	Joint family	Tamil	4	No	Television
2	13	F	8 th	Viilage	Rs ≤ 5000/-	Nuclear family	Tamil	3	No	News paper
3	14	M	8 th	Viilage	Rs ≥ 15000/-	Nuclear family	Tamil	2	No	Radio
4	13	M	8 th	Viilage	Rs 5001-15000	Joint family	Tamil	2	No	Television
5	13	M	8 th	Viilage	Rs 5001-15000	Nuclear family	Tamil	2	No	Radio
6	14	M	8 th	city	Rs ≤ 5000/-	Nuclear family	Telugu	1	No	News paper
7	14	F	8 th	city	Rs 5001-15000	Joint family	Tamil	2	No	Radio
8	14	F	8 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	2	No	Television
9	13	F	8 th	city	Rs 5001-15000	Nuclear family	Tamil	1	No	News paper
10	13	M	8 th	Viilage	Rs ≤ 5000/-	Nuclear family	Tamil	2	No	Radio
11	13	F	8 th	city	Rs 5001-15000	Nuclear family	Tamil	2	Yes	Television
12	12	F	8 th	city	Rs 5001-15000	Joint family	Tamil	2	No	News paper
13	12	F	8 th	Viilage	Rs 5001-15000	Nuclear family	Telugu	2	No	Television
14	12	M	8 th	city	Rs ≤ 5000/-	Nuclear family	Tamil	2	No	Cell Phone
15	13	M	8 th	Viilage	Rs 5001-15000	Nuclear family	Tamil	2	No	Radio
16	12	M	8 th	city	Rs 5001-15000	Joint family	Tamil	2	No	Television
17	13	M	8 th	Viilage	Rs ≥ 15000/-	Nuclear family	Telugu	1	No	News paper
18	13	F	8 th	city	Rs 5001-15000	Nuclear family	Tamil	1	Yes	News paper
19	13	F	8 th	city	Rs 5001-15000	Nuclear family	Telugu	2	No	Cell Phone
20	13	F	8th	Viilage	Rs ≤ 5000/-	Joint family	Tamil	2	No	Television
21	14	M	7 th	city	Rs 5001-15000	Nuclear family	Telugu	2	No	News paper
22	12	F	7 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	2	No	Cell Phone
23	13	F	7 th	city	Rs 5001-15000	Joint family	Tamil	2	No	Television
24	13	F	7 th	city	Rs 5001-15000	Nuclear family	Tamil	3	No	News paper
25	12	M	7 th	Viilage	Rs ≤ 5000/-	Nuclear family	Tamil	1	No	Television
26	12	M	7 th	city	Rs 5001-15000	Nuclear family	Tamil	1	No	News paper
27	12	M	7 th	city	Rs 5001-15000	Joint family	Tamil	1	No	Cell Phone
28	12	M	7 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	News paper
29	13	M	7 th	city	Rs ≤ 5000/-	Nuclear family	Tamil	2	No	Television
30	12	M	7 th	Viilage	Rs 5001-15000	Joint family	Tamil	2	No	Radio

A STUDY TO ASSESS THE EFFECTIVENESS OF IEC PACKAGE ON DISASTER PREPAREDNESS AMONG SELECTED SCHOOL CHILDREN AT MEDAVAKKAM, KANCEEPURAM DISTRICT

A.Sasikala M.Sc., (N) Second Year Student, College of Nursing, MMC, Chennai.

S. No.	Age	F	EDUCATION	POL	INC	TOF	LANG	TNC	PREV EX	Information through
31	12	F	7 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	News paper
32	13	F	7 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	Television
33	12	F	7 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	1	No	Radio
34	12	M	7 th	city	Rs 5001-15000	Joint family	Telugu	1	No	Cell Phone
35	13	F	7 th	Viilage	Rs ≤ 5000/-	Nuclear family	Tamil	1	No	Television
36	13	F	7 th	city	Rs 5001-15000	Nuclear family	Tamil	1	Yes	News paper
37	12	M	7 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	1	No	Cell Phone
38	13	F	7 th	city	Rs 5001-15000	Joint family	Tamil	1	No	Television
39	12	M	7 th	city	Rs 5001-15000	Nuclear family	Tamil	1	No	News paper
40	13	F	7 th	city	Rs ≤ 5000/-	Nuclear family	Telugu	2	No	Radio
41	12	F	6 th	city	Rs 5001-15000	Joint family	Tamil	2	Yes	News paper
42	13	M	6 th	city	Rs ≥ 15000/-	Nuclear family	Telugu	2	No	Television
43	12	M	6 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	News paper
44	12	F	6 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	Cell Phone
45	12	M	6 th	Viilage	Rs ≤ 5000/-	Joint family	Tamil	2	No	Radio
46	12	M	6 th	city	Rs 5001-15000	Nuclear family	Telugu	1	No	Television
47	12	M	6 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	2	Yes	Cell Phone
48	11	F	6 th	city	Rs 5001-15000	Joint family	Hindi	2	No	Radio
49	12	M	6 th	city	Rs ≤ 5000/-	Nuclear family	Tamil	1	No	Television
50	12	F	6 th	city	Rs 5001-15000	Nuclear family	Tamil	1	No	News paper
51	12	F	6 th	Viilage	Rs ≥ 15000/-	Joint family	Tamil	2	No	Cell Phone
52	12	F	6 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	News paper
53	12	M	6 th	city	Rs ≤ 5000/-	Nuclear family	Tamil	2	No	Radio
54	12	F	6 th	city	Rs 5001-15000	Joint family	Tamil	2	No	News paper
55	12	F	6 th	city	Rs 5001-15000	Nuclear family	Tamil	2	No	Television
56	11	F	6 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	2	No	News paper
57	12	M	6 th	Viilage	Rs 5001-15000	Joint family	Tamil	2	No	Radio
58	11	M	6 th	city	Rs 5001-15000	Nuclear family	Tamil	1	No	Cell Phone
59	12	M	6 th	city	Rs ≤ 5000/-	Joint family	Tamil	1	No	Television
60	12	M	6 th	city	Rs ≥ 15000/-	Nuclear family	Tamil	2	No	Radio

A STUDY TO ASSESS THE EFFECTIVENESS OF IEC PACKAGE ON DISASTER PREPAREDNESS AMONG SELECTED SCHOOL CHILDREN AT MEDAVAKKAM, KANCEEPURAM DISTRICT

A.Sasikala M.Sc., (N) Second Year Student, College of Nursing, MMC, Chennai.

PRE TEST SCORE																						POST TEST SCORE																							
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	ARKS (	%	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	1	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	MARK
2	2	2	3	1	1	2	2	1	1	1	1	1	3	1	3	2	2	2	2			2	1	1	1	3	3	1	1	1	1	1	1	3	3	2	2	1	1	1	1	
3	1	3	1	3	2	2	1	2	1	1	1	3	3	2	1	3	3	3	3			1	1	1	1	3	3	1	1	2	2	2	1	3	3	2	2	1	1	1	1	
1	3	2	1	1	1	3	2	3	2	2	2	1	1	3	1	3	2	2	2			2	1	1	1	3	3	1	1	1	1	1	2	3	3	2	2	1	1	1	1	
3	2	3	3	3	3	2	3	1	1	1	3	2	3	1	3	2	3	1	1			1	1	1	1	2	3	1	1	1	1	2	1	3	3	1	2	1	1	1	2	
3	3	3	1	2	2	1	1	2	1	3	3	2	1	2	1	3	3	3	3			2	2	1	1	3	1	1	1	1	1	2	1	3	3	2	2	1	1	3	2	
2	2	2	3	1	1	3	2	3	2	2	1	1	3	2	1	2	2	2	2			1	2	1	1	2	3	2	2	2	2	1	1	1	1	1	3	3	2	3	2	
3	2	3	3	3	2	2	1	3	1	3	1	2	1	1	3	3	3	3	3			2	1	1	3	3	1	1	2	1	2	1	1	3	1	2	1	2	2	3	1	
2	3	2	1	3	2	3	3	1	3	3	2	2	2	2	1	3	1	3	1			1	2	1	1	3	3	1	2	3	1	1	1	3	3	2	2	1	1	1	1	
3	2	3	3	1	1	3	3	3	2	2	3	1	2	3	3	2	3	2	3			1	2	1	1	3	1	2	3	1	1	1	2	3	3	2	2	1	1	1	1	
3	3	2	1	1	2	2	3	2	1	3	3	2	1	1	1	3	2	3	2			1	1	1	2	3	3	1	1	1	1	3	2	1	3	2	1	1	2	2	1	
2	1	3	3	2	2	3	3	3	1	3	2	2	2	2	1	3	3	3	3			1	2	1	1	3	3	1	1	3	1	1	1	3	3	3	2	1	1	2	1	
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3	1	3	1	2	2	2	2	3	2	3	2	2	2	3	3	3	3	2	3			1	2	1	1	2	3	1	2	2	1	1	1	1	1	3	2	2	1	1	1	
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3	2	2	3	1	3	3	2	1	3	2	2	1	2	3	1	1	3	2	2			1	2	1	1	3	2	1	1	1	1	1	1	3	2	2	2	1	1	3	1	
1	3	3	2	2	1	3	3	3	2	3	3	2	1	1	3	3	2	1	3			2	1	1	1	3	3	1	2	1	2	1	1	3	1	2	1	3	1	3	1	

A STUDY TO ASSESS THE EFFECTIVENESS OF IEC PACKAGE ON DISASTER PREPAREDNESS AMONG SELECTED SCHOOL CHILDREN AT MEDAVAKKAM, KANCEEPURAM DISTRICT

A.Sasikala M.Sc., (N) Second Year Student, College of Nursing, MMC, Chennai.

PRE TEST SCORE																						POST TEST SCORE																						
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	ARKS (	%	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	1	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	MARK
3	2	3	1	1	2	2	1	2	1	3	2	2	2	3	1	2	3	3	3			1	1	1	2	3	3	2	2	1	1	2	1	2	3	2	2	1	1	1	3	
3	3	2	3	2	2	3	2	1	3	2	3	1	2	3	1	3	1	2	3			1	1	1	1	3	3	1	2	3	1	3	1	3	3	2	2	3	2	1	1	
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2	3	3	2	3	2	1	3	1	3	2	3	2	1	1	1	3	3	3	3			2	1	1	1	3	3	3	1	2	1	2	2	3	3	2	3	1	1	1	2	
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2	2	2	3	3	3	3	3	3	2	1	1	3	2	3	3	3	2	3	3			1	1	2	1	2	3	1	1	2	1	2	1	3	3	2	1	3	1	1	1	
1	3	3	1	2	2	2	2	2	1	3	3	2	2	1	2	3	2	2	2			1	1	1	2	2	3	1	1	1	1	2	1	3	3	2	1	1	1	2	1	
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3	3	2	1	1	2	3	2	2	2	3	3	3	2	1	1	3	2	3	2			1	1	1	3	3	3	1	1	1	1	1	1	2	3	1	2	1	2	3	1	
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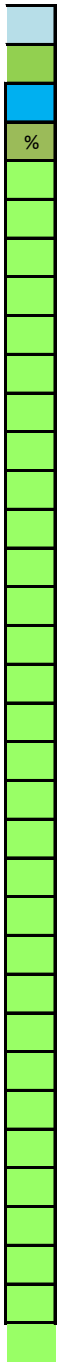

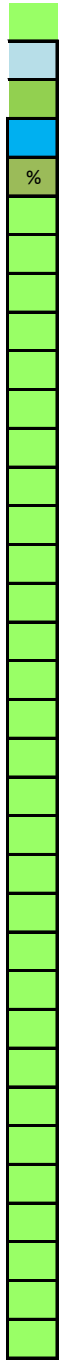

A STUDY TO ASSESS THE EFFECTIVENESS OF IEC

A.Sasika

S. No.	Age	F	EDUCATION	POL	INC	TOF	LANG	TNC
1	14	F	8 th	city	Rs ≤ 5000/-	Joint family	Tamil	4
2	13	F	8 th	Viilage	Rs ≤ 5000/-	uclear fami	Tamil	3
3	14	M	8 th	Viilage	Rs ≥ 15000/	uclear fami	Tamil	2
4	13	M	8 th	Viilage	s 5001-150	Joint family	Tamil	2
5	13	M	8 th	Viilage	s 5001-150	uclear fami	Tamil	2
6	14	M	8 th	city	Rs ≤ 5000/-	uclear fami	Telugu	1
7	14	F	8 th	city	s 5001-150	Joint family	Tamil	2
8	14	F	8 th	city	Rs ≥ 15000/	uclear fami	Tamil	2
9	13	F	8 th	city	s 5001-150	uclear fami	Tamil	1
10	13	M	8 th	Viilage	Rs ≤ 5000/-	uclear fami	Tamil	2
11	13	F	8 th	city	s 5001-150	uclear fami	Tamil	2
12	12	F	8 th	city	s 5001-150	Joint family	Tamil	2
13	12	F	8 th	Viilage	s 5001-150	uclear fami	Telugu	2
14	12	M	8 th	city	Rs ≤ 5000/-	uclear fami	Tamil	2
15	13	M	8 th	Viilage	s 5001-150	uclear fami	Tamil	2
16	12	M	8 th	city	s 5001-150	Joint family	Tamil	2
17	13	M	8 th	Viilage	Rs ≥ 15000/	uclear fami	Telugu	1
18	13	F	8 th	city	s 5001-150	uclear fami	Tamil	1
19	13	F	8 th	city	s 5001-150	uclear fami	Telugu	2
20	13	F	8th	Viilage	Rs ≤ 5000/-	Joint family	Tamil	2
21	14	M	7 th	city	s 5001-150	uclear fami	Telugu	2
22	12	F	7 th	city	Rs ≥ 15000/	uclear fami	Tamil	2
23	13	F	7 th	city	s 5001-150	Joint family	Tamil	2
24	13	F	7 th	city	s 5001-150	uclear fami	Tamil	3
25	12	M	7 th	Viilage	Rs ≤ 5000/-	uclear fami	Tamil	1
26	12	M	7 th	city	s 5001-150	uclear fami	Tamil	1
27	12	M	7 th	city	s 5001-150	Joint family	Tamil	1
28	12	M	7 th	city	s 5001-150	uclear fami	Tamil	2
29	13	M	7 th	city	Rs ≤ 5000/-	uclear fami	Tamil	2
30	12	M	7 th	Viilage	s 5001-150	Joint family	Tamil	2
31	12	F	7 th	city	s 5001-150	uclear fami	Tamil	2
32	13	F	7 th	city	s 5001-150	uclear fami	Tamil	2
33	12	F	7 th	city	Rs ≥ 15000/	uclear fami	Tamil	1
34	12	M	7 th	city	s 5001-150	Joint family	Telugu	1
35	13	F	7 th	Viilage	Rs ≤ 5000/-	uclear fami	Tamil	1
36	13	F	7 th	city	s 5001-150	uclear fami	Tamil	1
37	12	M	7 th	city	Rs ≥ 15000/	uclear fami	Tamil	1
38	13	F	7 th	city	s 5001-150	Joint family	Tamil	1
39	12	M	7 th	city	s 5001-150	uclear fami	Tamil	1
40	13	F	7 th	city	Rs ≤ 5000/-	uclear fami	Telugu	2

41	12	F	6 th	city	s 5001-1500	Joint family	Tamil	2
42	13	M	6 th	city	Rs ≥ 15000/	uclear fami	Telugu	2
43	12	M	6 th	city	s 5001-1500	uclear fami	Tamil	2
44	12	F	6 th	city	s 5001-1500	uclear fami	Tamil	2
45	12	M	6 th	Viilage	Rs ≤ 5000/-	Joint family	Tamil	2
46	12	M	6 th	city	s 5001-1500	uclear fami	Telugu	1
47	12	M	6 th	city	Rs ≥ 15000/	uclear fami	Tamil	2
48	11	F	6 th	city	s 5001-1500	Joint family	Hindi	2
49	12	M	6 th	city	Rs ≤ 5000/-	uclear fami	Tamil	1
50	12	F	6 th	city	s 5001-1500	uclear fami	Tamil	1
51	12	F	6 th	Viilage	Rs ≥ 15000/	Joint family	Tamil	2
52	12	F	6 th	city	s 5001-1500	uclear fami	Tamil	2
53	12	M	6 th	city	Rs ≤ 5000/-	uclear fami	Tamil	2
54	12	F	6 th	city	s 5001-1500	Joint family	Tamil	2
55	12	F	6 th	city	s 5001-1500	uclear fami	Tamil	2
56	11	F	6 th	city	Rs ≥ 15000/	uclear fami	Tamil	2
57	12	M	6 th	Viilage	s 5001-1500	Joint family	Tamil	2
58	11	M	6 th	city	s 5001-1500	uclear fami	Tamil	1
59	12	M	6 th	city	Rs ≤ 5000/-	Joint family	Tamil	1
60	12	M	6 th	city	Rs ≥ 15000/	uclear fami	Tamil	2

C PACKAGE ON DISASTER PREPAREDNESS AMONG SELECTED SCHOOL CHILDREN AT MEDAVAKKAM, KA

ala M.Sc., (N) Second Year Student, College of Nursing, MMC, Chennai.

PREV EX	rmation through	Q1	Q2	Q3	Q4	Q5	Q6
No	Television	2	2	2	3	1	1
No	News paper	3	1	3	1	3	2
No	Radio	1	3	2	1	1	1
No	Television	3	2	3	3	3	3
No	Radio	3	3	3	1	2	2
No	News paper	2	2	2	3	1	1
No	Radio	3	2	3	3	3	2
No	Television	2	3	2	1	3	2
No	News paper	3	2	3	3	1	1
No	Radio	3	3	2	1	1	2
Yes	Television	2	1	3	3	2	2
No	News paper	1	2	3	1	3	1
No	Television	3	3	3	3	1	2
No	Cell Phone	1	2	2	1	3	1
No	Radio	3	1	3	1	2	2
No	Television	1	3	3	3	1	1
No	News paper	2	2	2	1	2	2
Yes	News paper	3	3	3	3	3	2
No	Cell Phone	1	2	3	3	3	2
No	Television	3	3	3	3	2	3
No	News paper	3	1	2	1	3	1
No	Cell Phone	2	2	1	3	2	2
No	Television	1	3	2	1	1	3
No	News paper	3	2	2	3	3	1
No	Television	2	1	3	1	3	1
No	News paper	3	2	2	3	2	2
No	Cell Phone	1	3	3	2	1	2
No	News paper	2	3	1	1	3	2
No	Television	3	2	2	3	1	3
No	Radio	1	3	3	2	2	1
No	News paper	3	2	3	1	1	2
No	Television	3	3	2	3	2	2
No	Radio	3	2	3	2	3	2
No	Cell Phone	1	3	2	3	3	2
No	Television	3	3	3	2	1	1
Yes	News paper	2	2	3	3	2	2
No	Cell Phone	1	3	2	2	3	3
No	Television	3	2	3	1	1	3
No	News paper	1	3	3	2	3	1
No	Radio	3	2	3	3	2	3

Yes	News paper	2	3	2	2	1	2
No	Television	1	2	2	2	2	1
No	News paper	3	3	2	3	2	3
No	Cell Phone	1	2	2	2	1	2
No	Radio	3	1	3	3	2	2
No	Television	2	2	3	2	1	1
Yes	Cell Phone	1	1	2	2	3	3
No	Radio	3	2	3	3	2	2
No	Television	2	3	3	2	3	2
No	News paper	1	2	2	2	1	3
No	Cell Phone	3	2	3	3	2	3
No	News paper	2	3	2	1	3	1
No	Radio	3	2	3	1	3	3
No	News paper	1	3	3	2	1	1
No	Television	2	2	2	3	3	3
No	News paper	1	3	3	1	2	2
No	Radio	3	2	1	2	2	1
No	Cell Phone	2	1	3	3	2	3
No	Television	3	3	2	1	1	2
No	Radio	1	3	3	3	2	1

ANCEEPURAM DISTRICT

PRE TEST SCO

Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
2	2	1	1	1	1	1	3	1
2	1	2	1	1	1	3	3	2
3	2	3	2	2	2	1	1	3
2	3	1	1	1	3	2	3	1
1	1	2	1	3	3	2	1	2
3	2	3	2	2	1	1	3	2
2	1	3	1	3	1	2	1	1
3	3	1	3	3	2	2	2	2
3	3	3	2	2	3	1	2	3
2	3	2	1	3	3	2	1	1
3	3	3	1	3	2	2	2	2
3	2	1	2	2	3	1	2	2
2	3	3	3	3	2	2	2	1
3	1	2	2	1	3	3	1	3
2	2	3	2	3	2	2	2	3
3	3	1	1	2	3	1	1	3
2	3	3	3	3	3	2	2	3
1	2	1	3	3	2	3	3	3
2	3	3	2	2	3	2	1	1
3	1	3	3	3	2	2	2	3
3	2	2	2	3	3	2	1	1
2	1	3	3	2	3	1	2	3
3	3	2	3	3	2	2	1	1
3	2	3	2	1	3	2	2	3
2	3	1	3	3	1	1	3	1
3	2	2	1	2	2	2	2	3
3	3	3	2	1	1	3	1	1
2	1	2	3	3	3	2	2	2
3	2	1	3	2	2	1	2	3
3	3	3	2	3	3	2	1	1
2	1	2	1	3	2	2	2	3
3	2	1	3	2	3	1	2	3
1	3	3	3	1	2	2	1	1
3	3	3	3	3	1	2	2	3
2	2	2	3	2	2	3	3	3
3	3	3	2	1	1	2	2	1
2	2	2	1	3	2	3	1	2
2	3	1	3	2	3	2	2	3
3	2	3	2	3	3	1	2	1
2	1	3	1	2	2	2	1	3

3	3	2	3	2	3	2	2	3
2	2	3	2	3	3	1	1	1
3	3	3	1	3	2	2	2	2
2	3	2	1	2	3	2	1	3
2	2	3	1	3	2	3	3	1
3	3	2	3	3	1	2	2	3
2	1	3	2	1	3	1	1	2
2	2	2	1	3	2	2	2	3
1	3	1	3	2	3	2	1	1
3	2	3	1	3	2	1	2	3
3	2	2	2	1	3	2	1	3
2	3	1	3	2	2	3	2	1
1	2	3	2	3	3	2	1	2
2	1	2	3	2	2	1	1	3
3	3	3	2	1	1	3	2	3
2	2	2	1	3	3	2	2	1
2	1	1	2	3	3	1	1	2
3	3	3	3	2	2	3	3	3
3	2	2	2	3	3	3	2	1
2	3	3	2	2	2	1	1	3

)RE								
Q16	Q17	Q18	Q19	Q20	MARKS (20	%	Q1	Q2
3	2	2	2	2			2	1
1	3	3	3	3			1	1
1	3	2	2	2			2	1
3	2	3	1	1			1	1
1	3	3	3	3			2	2
1	2	2	2	2			1	2
3	3	3	3	3			2	1
1	3	1	3	1			1	2
3	2	3	2	3			1	2
1	3	2	3	2			1	1
1	3	3	3	3			1	2
3	3	1	2	1			1	2
2	2	3	1	2			1	1
1	3	2	3	3			2	2
3	3	3	2	3			1	2
2	1	3	3	2			2	1
1	3	3	3	3			1	2
3	2	2	2	3			1	1
1	3	1	3	2			1	2
1	3	3	3	1			1	1
3	3	3	2	3			2	1
1	2	2	1	2			2	1
1	1	3	3	2			1	1
3	3	3	2	3			2	1
2	2	3	3	3			2	1
1	3	2	3	1			1	2
3	3	3	2	3			2	1
1	2	1	3	3			2	1
1	1	3	2	2			1	2
3	3	2	1	3			2	1
1	2	3	3	3			1	1
1	3	1	2	3			1	1
3	3	3	3	2			2	1
2	2	3	2	1			1	2
1	3	2	3	3			2	1
3	2	1	3	2			1	2
1	1	2	2	3			1	2
1	3	3	1	1			1	1
3	2	2	2	3			1	1
2	1	3	3	2			1	1

1	3	3	2	1			2	1
3	2	1	3	3			1	2
1	3	3	2	3			2	1
1	3	2	1	2			1	2
3	2	3	3	1			2	1
1	1	1	2	3			1	1
1	3	2	3	2			2	1
3	2	1	1	3			1	1
1	3	3	3	3			2	1
1	3	2	2	3			1	2
3	2	2	3	3			2	1
1	3	2	3	3			1	1
2	3	1	2	2			1	1
1	2	3	1	1			1	1
3	3	2	3	3			1	1
2	3	2	2	2			1	1
1	2	3	3	3			1	2
3	1	1	1	3			1	1
1	3	2	3	2			1	1
3	2	3	2	3			2	1

POST TEST SCORE								
Q3	Q4	Q5	Q6	Q7	Q8	1	Q10	Q11
1	1	3	3	1	1	1	1	1
1	1	3	3	1	1	2	2	2
1	1	3	3	1	1	1	1	1
1	1	2	3	1	1	1	1	2
1	1	3	1	1	1	1	1	2
1	1	2	3	2	2	2	2	1
1	3	3	1	1	2	1	2	1
1	1	3	3	1	2	3	1	1
1	1	3	1	2	3	1	1	1
1	2	3	3	1	1	1	1	3
1	1	3	3	1	1	3	1	1
1	1	1	3	2	1	1	1	1
1	1	1	3	1	1	2	1	1
1	1	3	3	1	2	1	2	1
1	1	2	3	1	2	2	1	1
1	1	2	1	1	3	1	1	3
1	1	3	2	1	1	1	2	1
1	1	1	3	1	1	3	1	2
1	2	3	3	1	2	1	1	1
1	2	3	3	1	2	1	1	2
1	1	3	3	1	1	1	2	1
1	1	3	2	2	1	2	1	1
2	1	3	2	2	1	2	2	1
2	1	3	3	1	1	1	1	1
1	1	3	3	2	1	1	1	1
3	1	3	3	1	2	1	1	1
2	1	3	2	1	1	1	2	1
1	1	3	2	1	1	3	1	1
1	1	3	2	1	1	1	1	1
1	1	3	3	1	2	1	2	1
1	2	3	3	2	2	1	1	2
1	1	3	3	1	2	3	1	3
2	1	3	3	1	3	1	1	2
1	1	3	1	3	2	1	1	1
1	1	1	1	3	3	1	2	2
1	2	3	1	1	3	1	1	2
1	3	3	3	1	3	1	2	1
1	1	3	3	1	1	2	2	1
1	3	2	3	3	1	3	1	1
1	1	3	3	1	1	1	1	2

1	3	3	2	1	1	1	1	1
2	1	3	3	1	1	2	3	1
1	1	3	3	3	1	2	2	1
1	1	3	3	1	3	1	1	1
1	1	3	3	1	2	1	1	1
2	1	3	2	1	1	1	1	2
1	1	3	3	1	1	1	1	1
1	1	3	3	2	1	1	1	2
1	1	3	3	3	1	2	1	2
1	1	1	2	1	1	1	2	2
2	1	2	3	1	1	2	1	1
1	3	2	3	1	2	1	1	1
1	2	1	3	1	1	2	3	1
1	2	1	2	1	2	1	1	1
2	1	2	3	1	1	2	1	2
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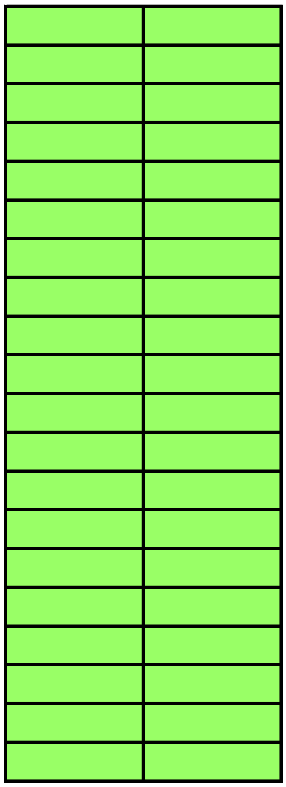
2	1	3	3	2	1	1	1	1
1	2	3	3	2	1	1	1	1
1	3	3	3	1	1	1	1	1
1	1	3	1	1	1	1	1	1

Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	3	3	2	2	1	1	1	1
1	3	3	2	2	1	1	1	1
2	3	3	2	2	1	1	1	1
1	3	3	1	2	1	1	1	2
1	3	3	2	2	1	1	3	2
1	1	1	1	3	3	2	3	2
1	3	1	2	1	2	2	3	1
1	3	3	2	2	1	1	1	1
2	3	3	2	2	1	1	1	1
2	1	3	2	1	1	2	2	1
1	3	3	3	2	1	1	2	1
1	3	3	1	2	1	1	2	2
1	3	1	3	2	3	3	1	2
1	1	1	2	2	3	3	1	1
1	1	3	2	2	1	1	1	1
2	3	3	2	2	1	3	1	1
2	1	1	2	2	1	1	3	2
3	3	1	3	2	1	2	3	2
1	3	1	3	1	1	1	1	1
1	3	3	2	2	1	2	1	1
1	3	3	2	1	1	3	2	1
1	1	3	3	1	1	1	3	1
1	3	2	2	1	1	1	1	3
1	1	2	2	2	1	3	1	3
2	3	3	3	2	1	1	1	1
1	1	3	2	3	1	1	1	1
1	3	3	2	1	1	3	1	1
2	3	2	2	2	1	2	3	1
1	3	2	2	2	1	1	3	1
1	2	3	1	2	1	2	1	3
1	2	3	2	2	1	1	1	3
1	3	3	2	2	3	2	1	1
2	3	2	2	3	1	1	2	1
1	2	2	2	1	1	2	2	1
2	3	3	2	2	1	1	1	1
1	3	2	1	2	3	1	1	3
2	2	3	2	2	2	1	1	1
2	3	3	2	3	1	3	3	1
1	3	2	2	3	1	1	2	1
1	3	3	3	2	2	3	1	1

1	1	3	1	2	1	1	1	3
2	1	2	2	1	2	3	1	1
3	3	3	2	2	1	1	2	1
1	3	3	3	1	2	3	2	1
3	1	2	3	2	2	1	1	1
2	1	2	2	1	1	3	1	1
1	3	3	2	2	1	1	3	1
1	3	3	3	2	3	2	3	3
2	3	3	2	3	1	1	1	2
1	3	1	2	1	1	2	1	2
1	3	1	2	2	3	1	1	1
1	3	3	3	3	1	1	3	1
1	1	3	3	2	1	1	1	1
1	3	3	2	2	1	1	1	1
1	3	3	2	1	3	1	1	1
1	3	3	2	1	1	1	2	1
1	1	3	1	2	1	1	1	2
1	2	3	2	2	1	1	1	1
2	3	1	2	1	2	3	1	1
1	3	3	1	2	1	2	2	1

MARKS	%



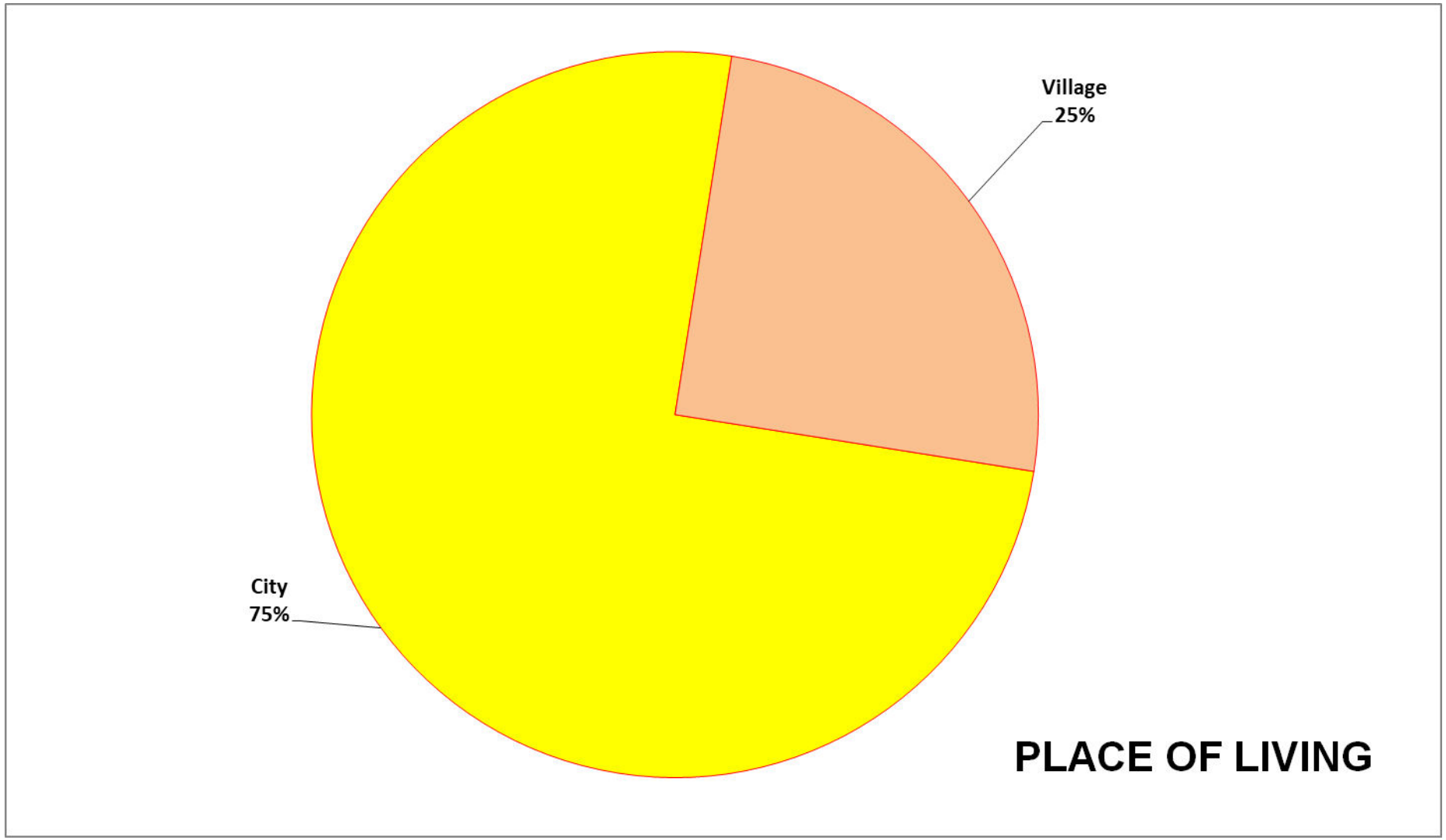


Fig. 4.3 Percentage distribution of place of living of selected school children

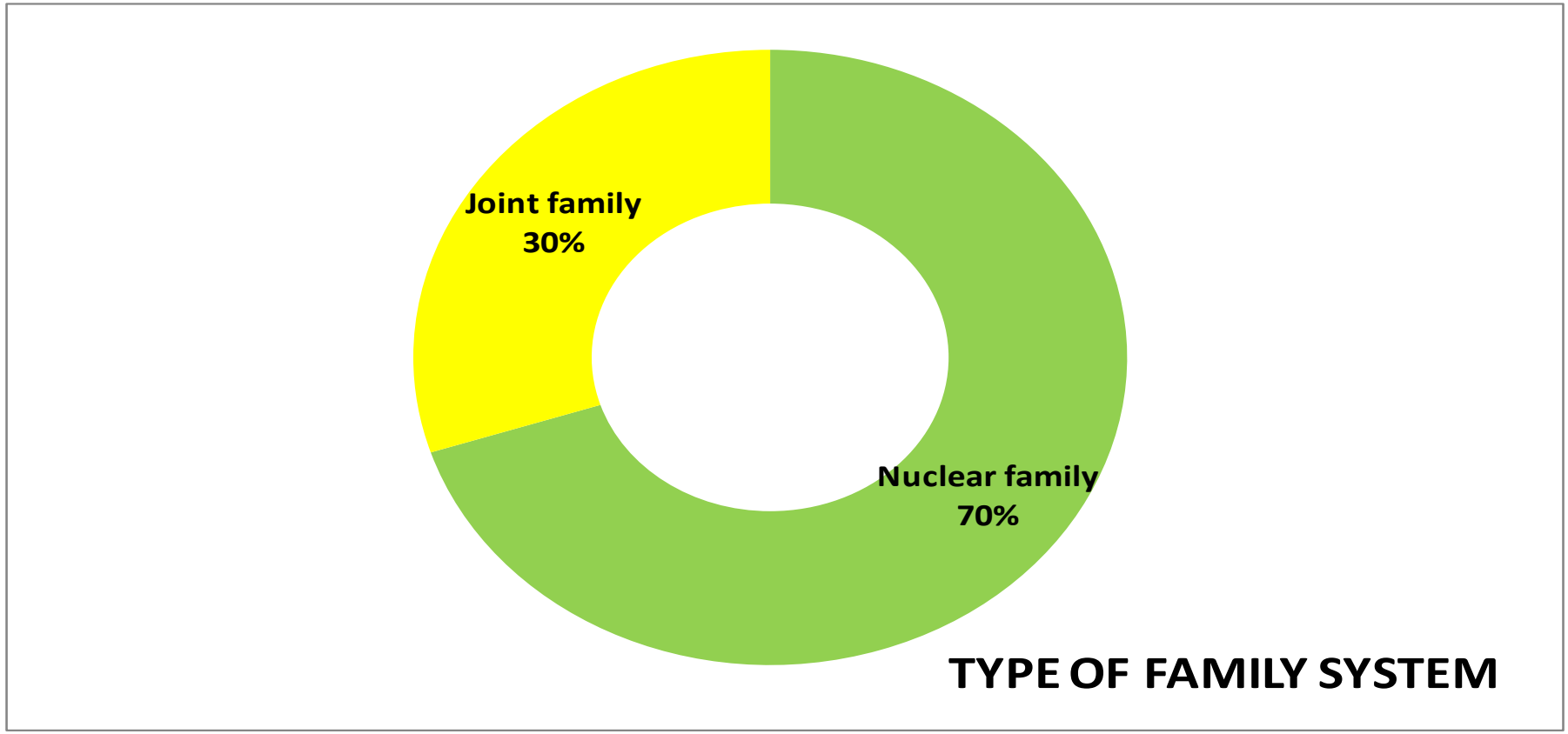


Fig. 4.4. Percentage distribution of family system of selected school children

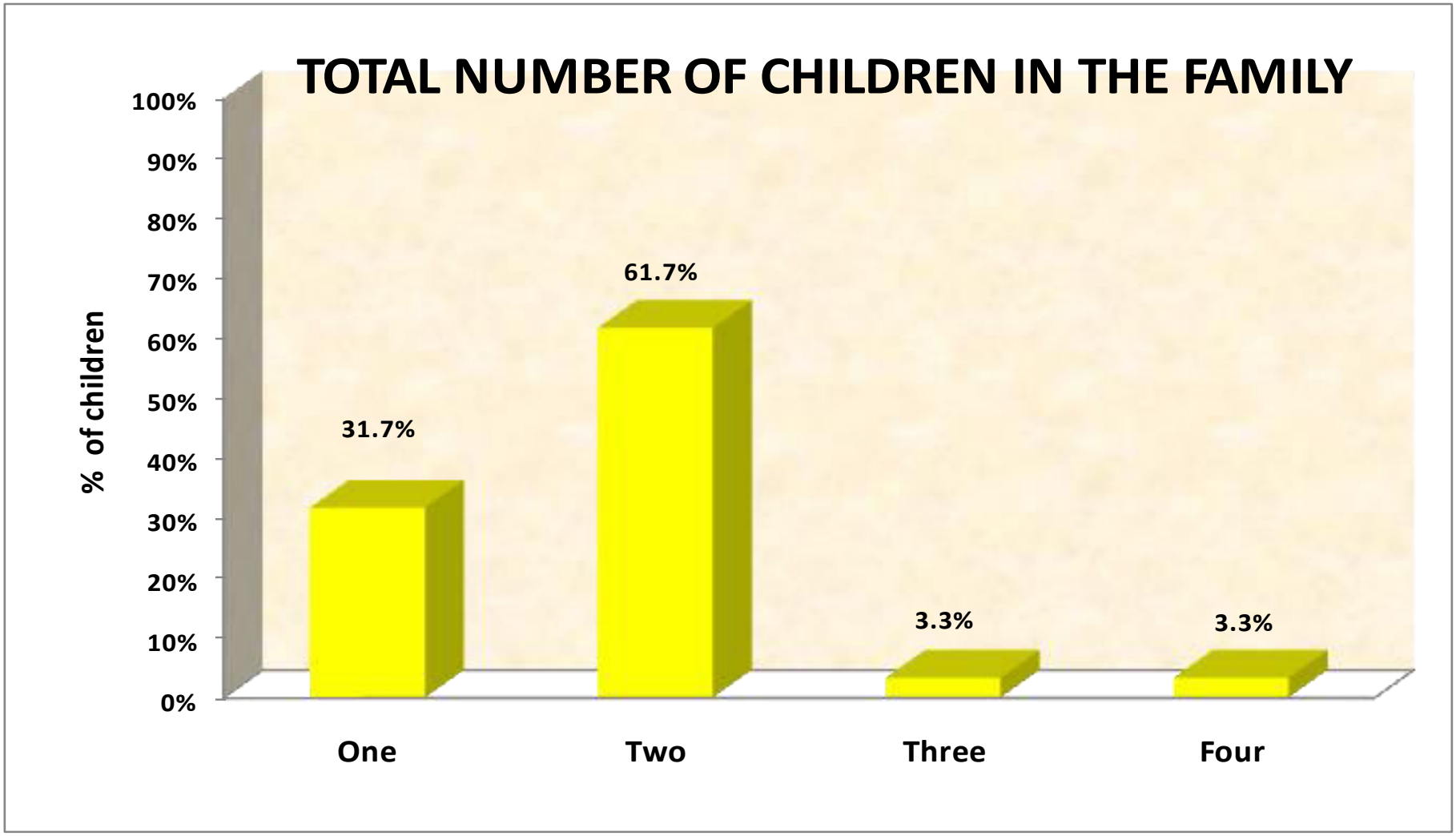


Fig. 4.5. Percentage distribution of total number of children in the family of selected school children

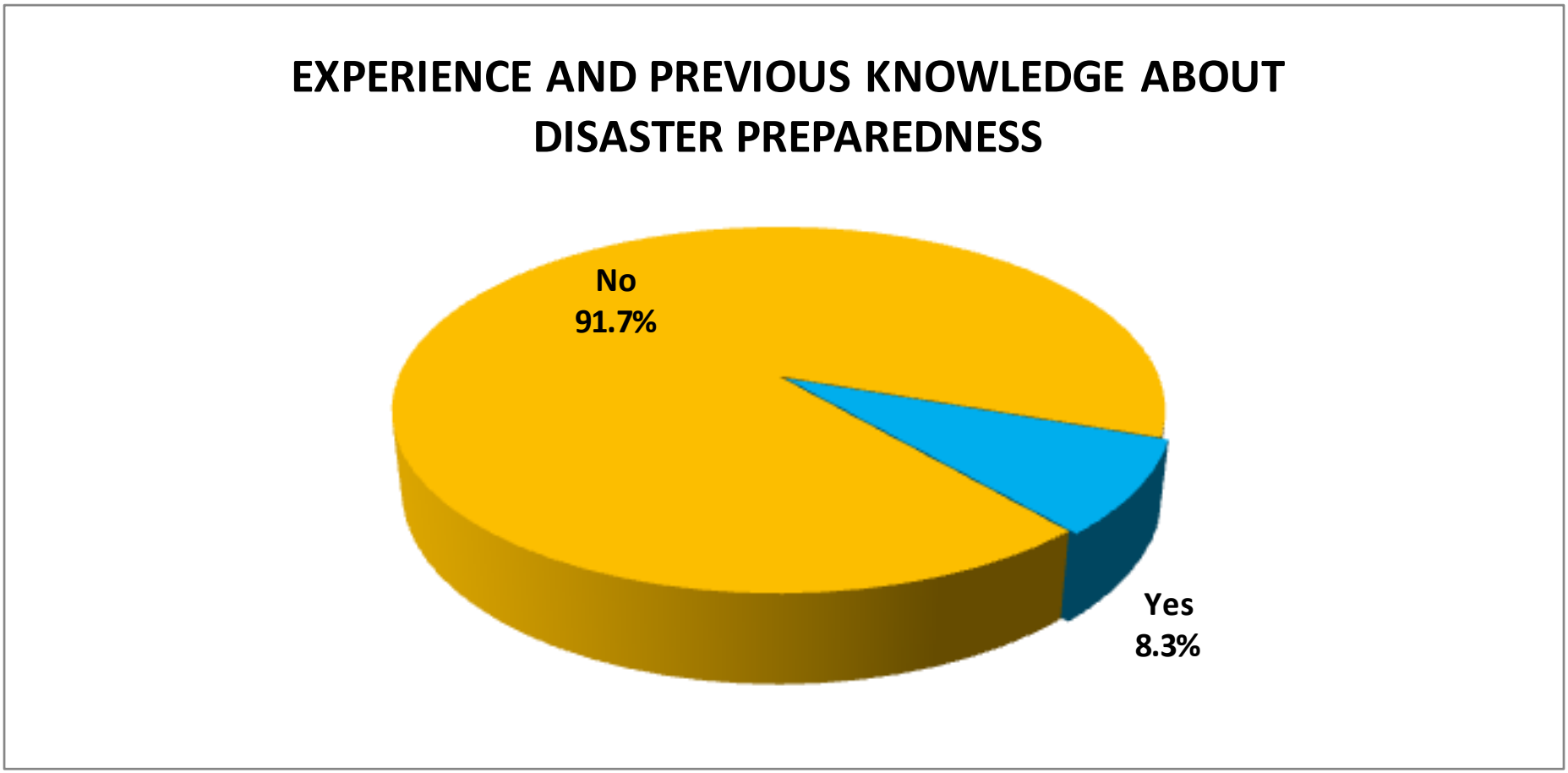


Fig. 4.6. Percentage distribution of experience and previous knowledge about disaster preparedness of selected school children.

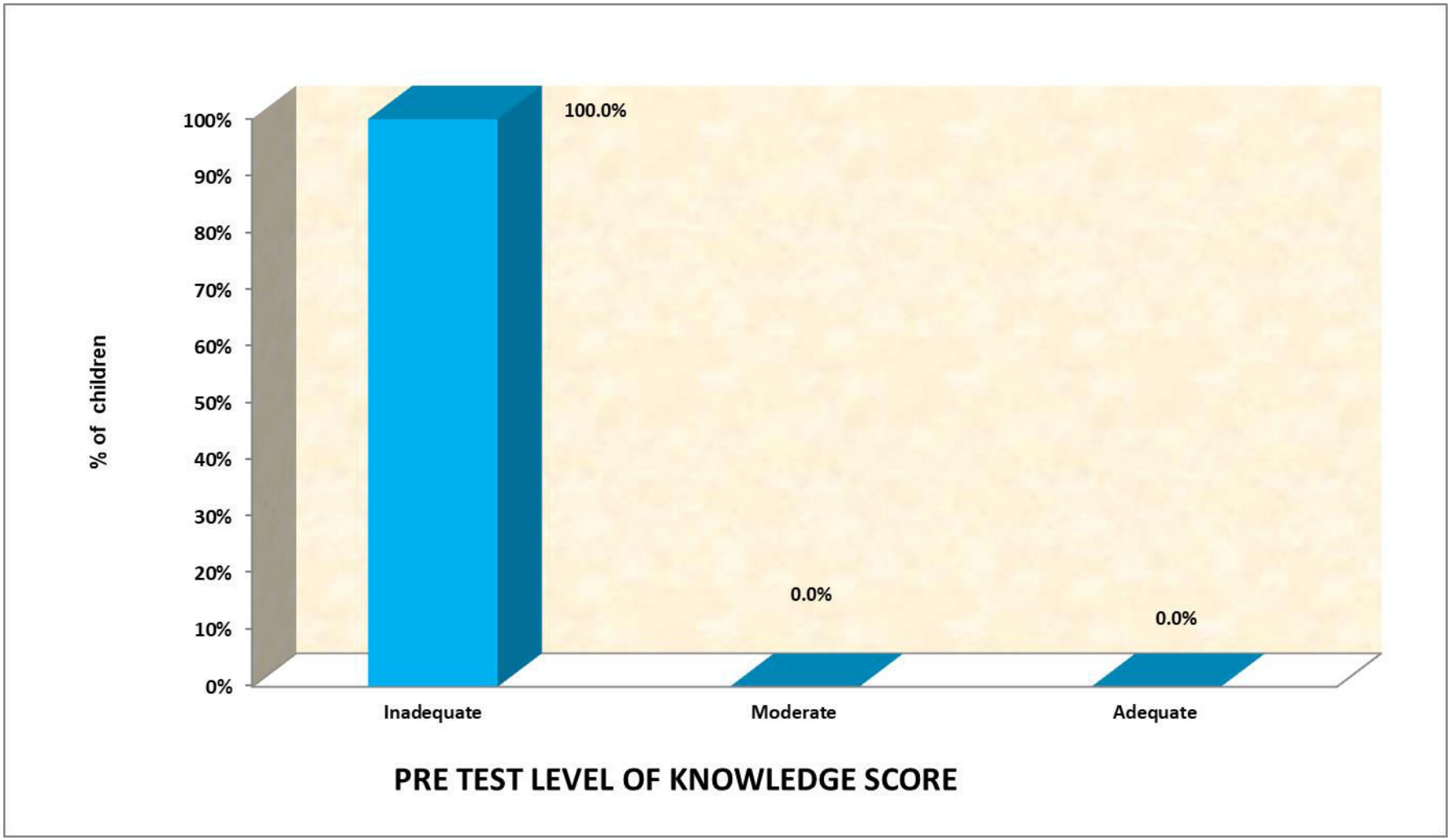


Fig. 4.7. Pre test level of knowledge score of selected school children.

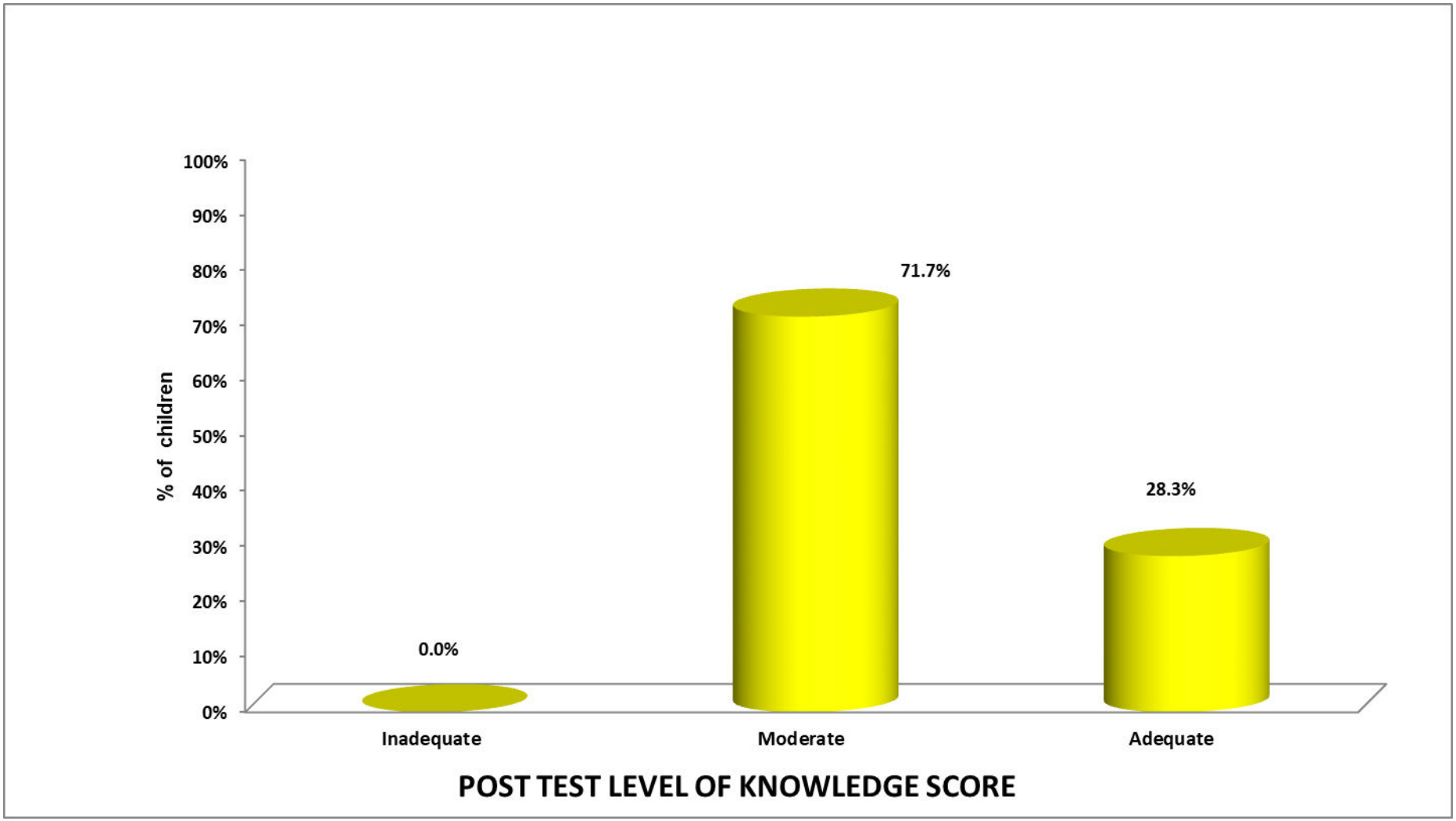


Fig.. 4.8. Post test level of knowledge score of selected school children

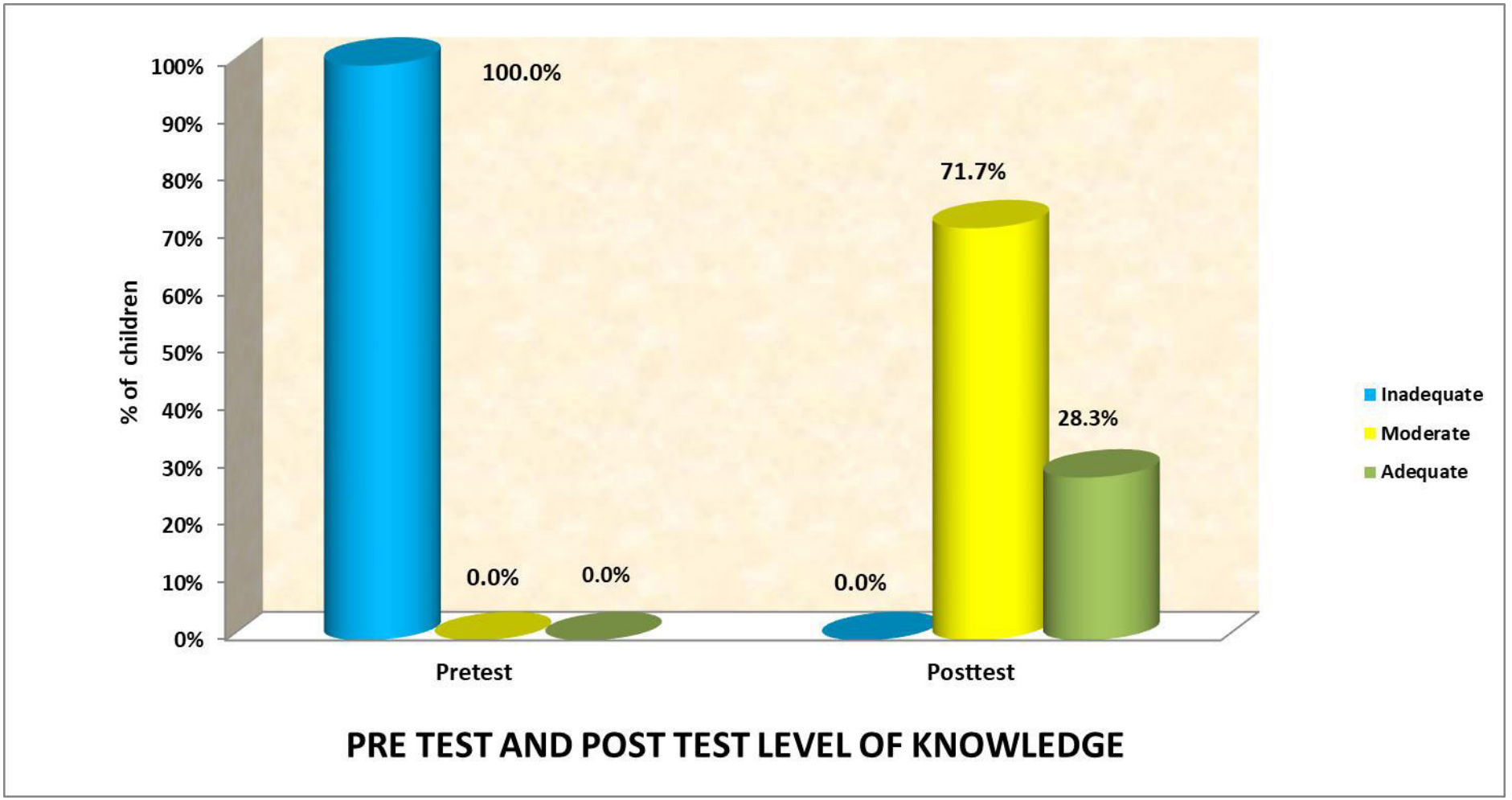


Fig.4.9. Pre test and post test level of knowledge score of selected school children

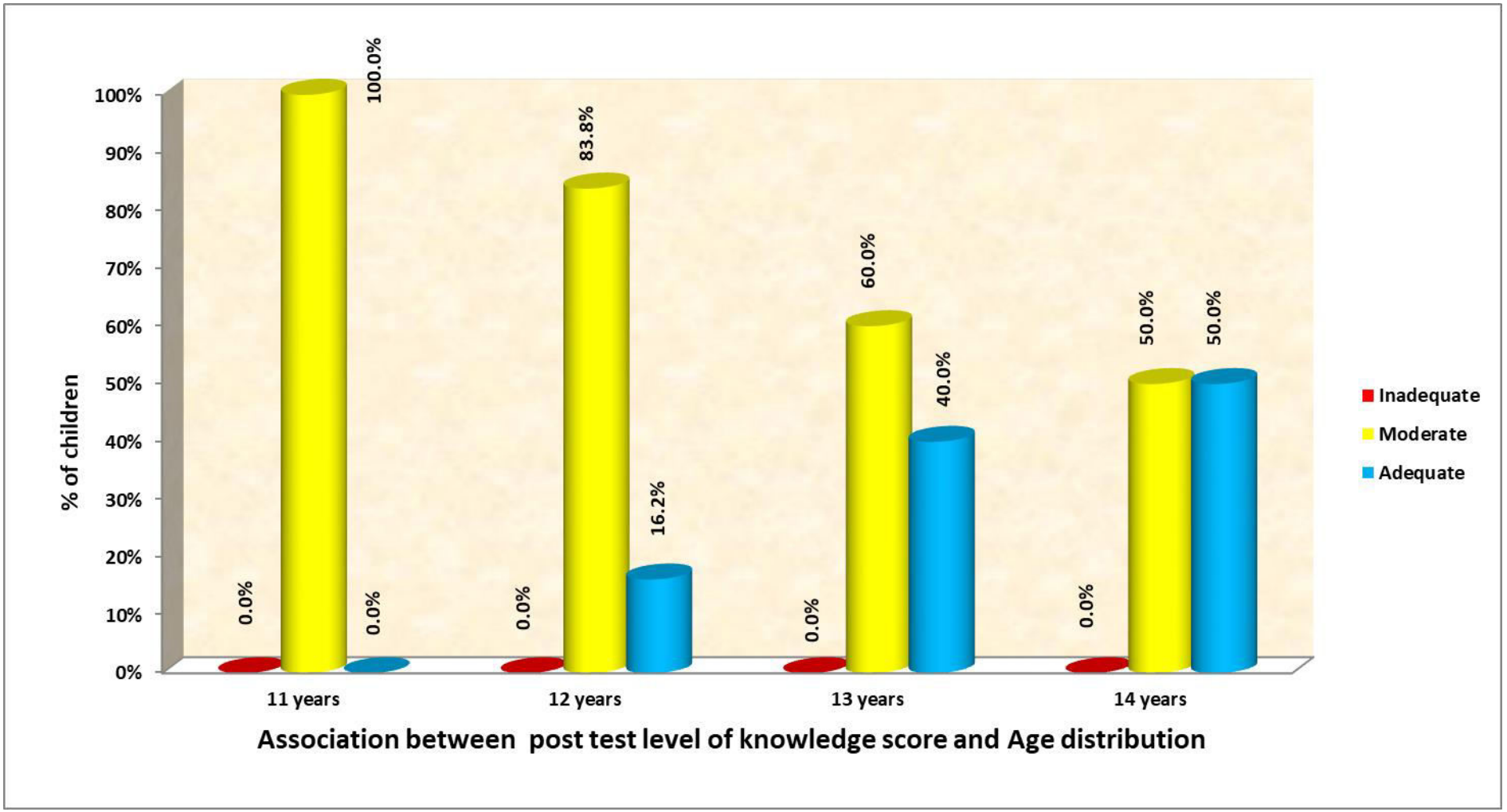


Fig. 4.10. Association between post test level of knowledge score and age distribution

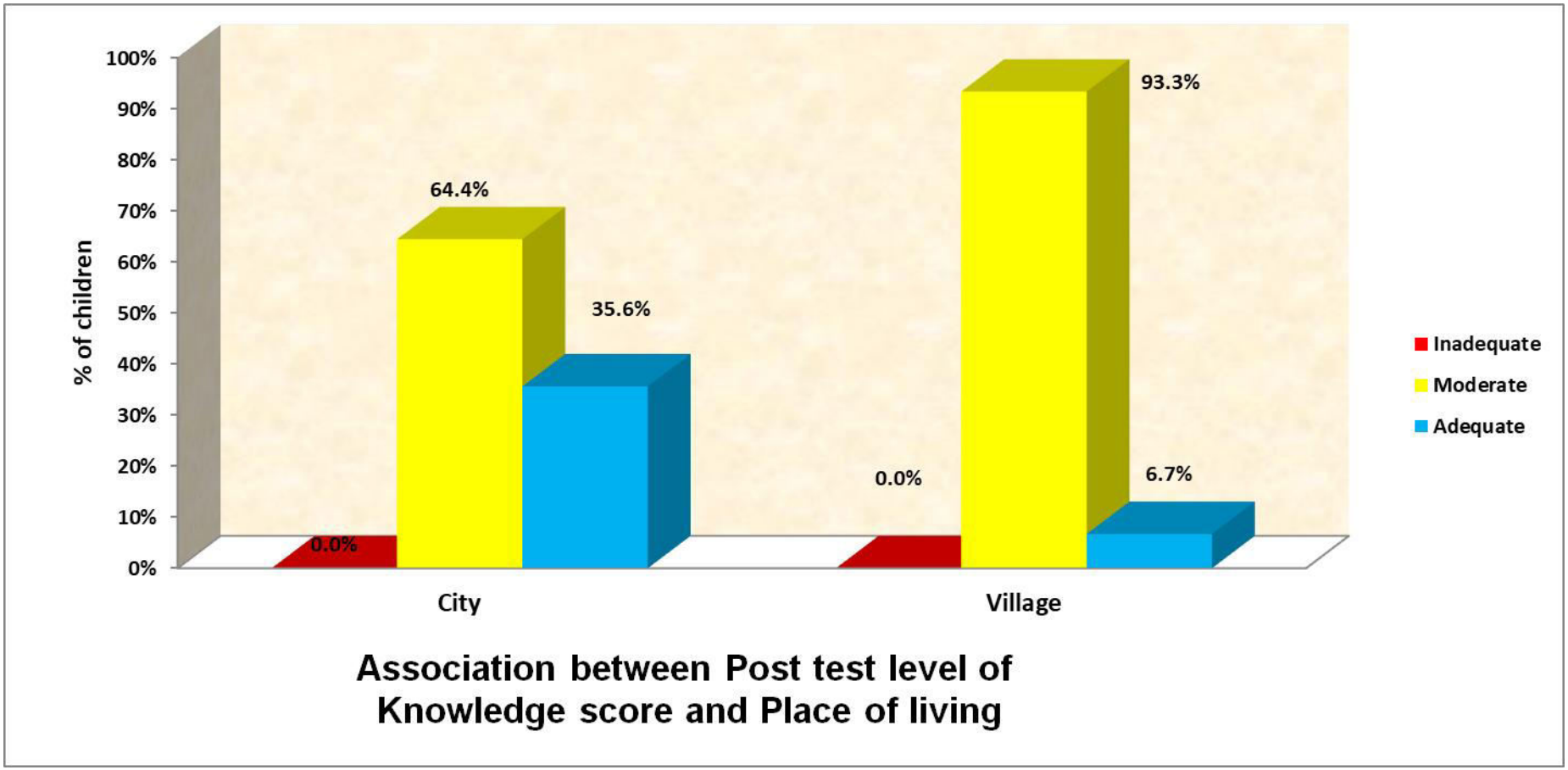


Fig.No.4.11 Association between post test level of knowledge score and place of living.

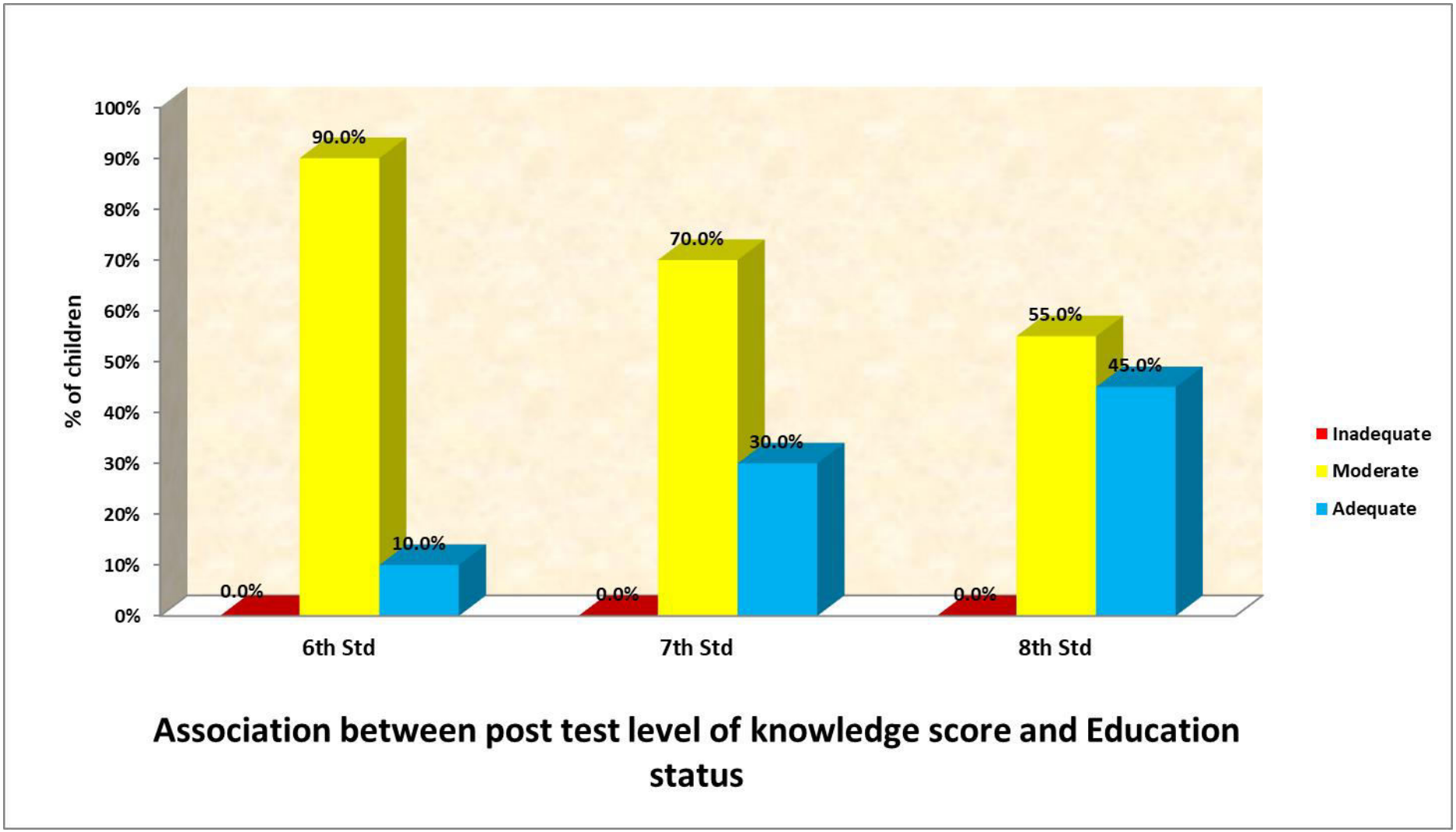


Fig..4.12 Association between post test level of knowledge score and educational status.

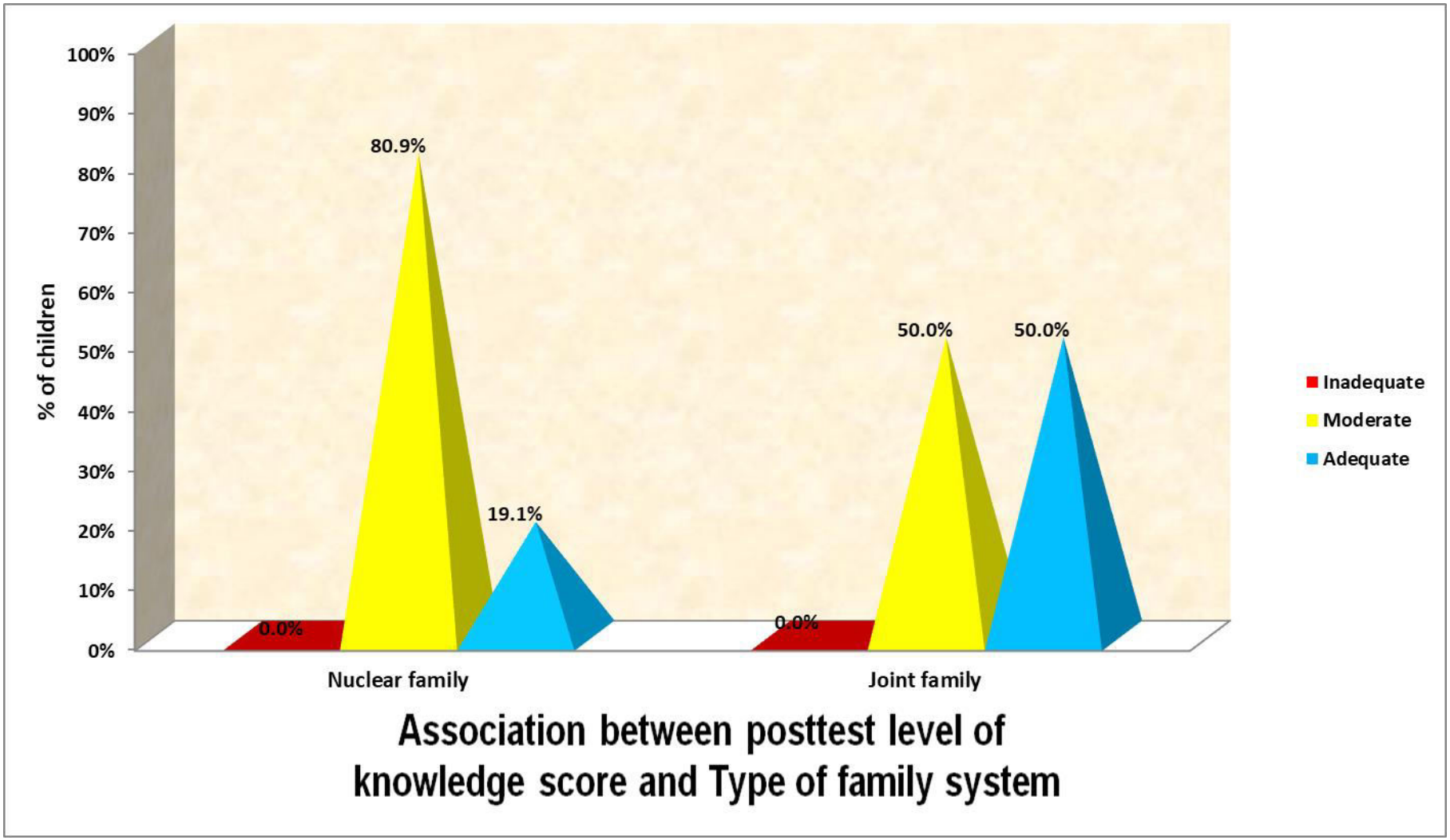


Fig..4.13. Association between post test level of knowledge score and type of family system

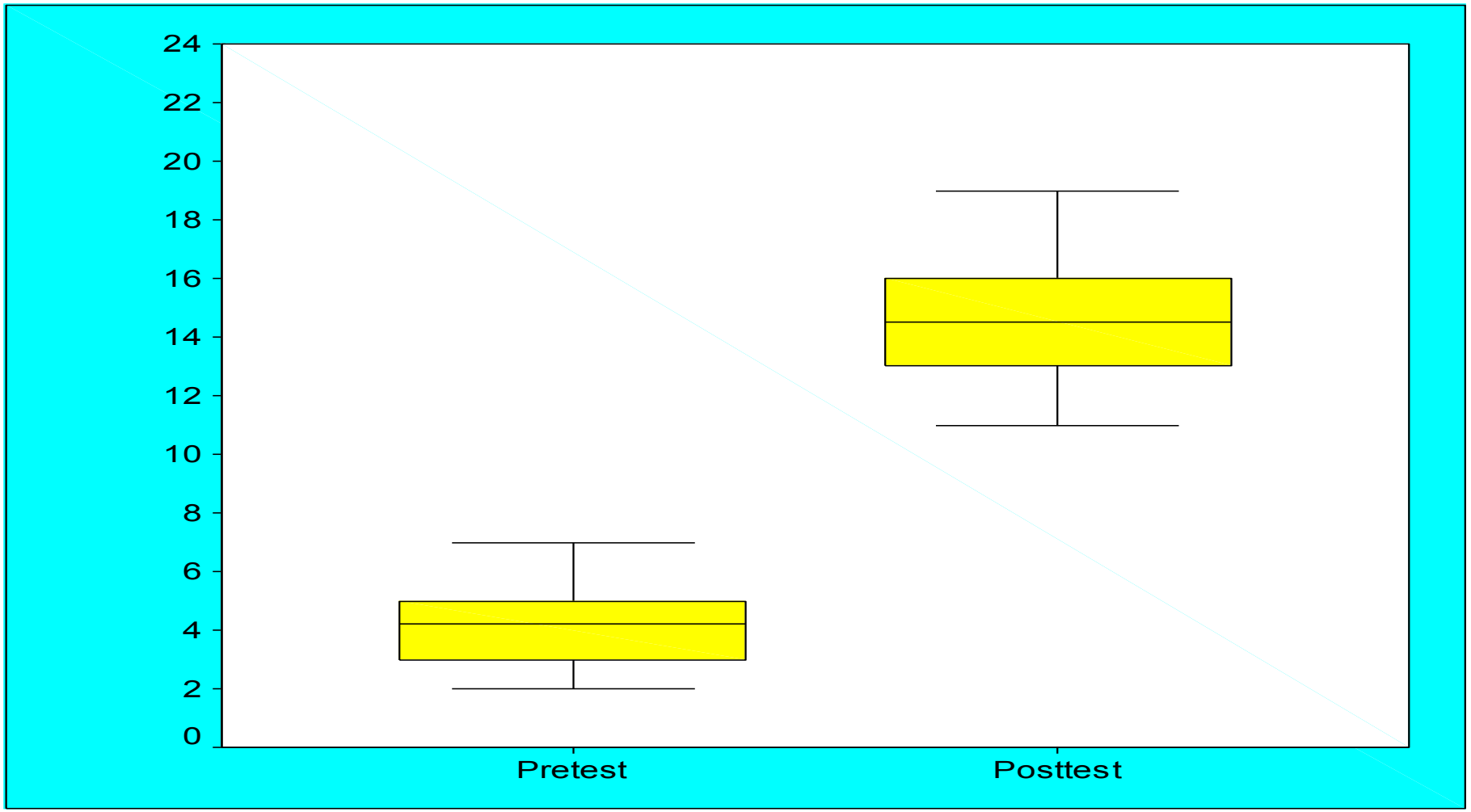


Fig. 4.14.Box plot compare the knowledge on disaster preparedness among selected school children before and after administration of IEC package.

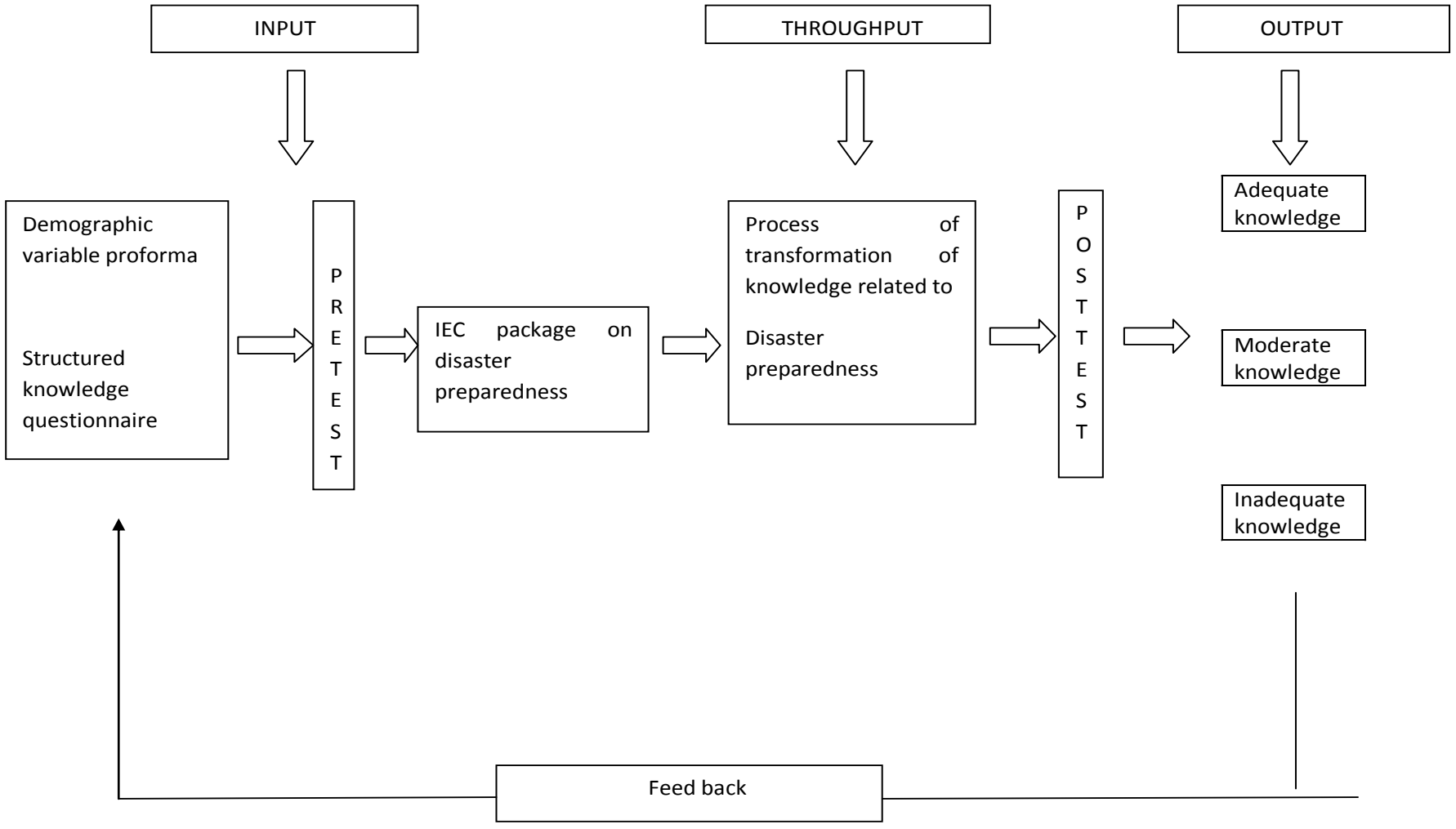
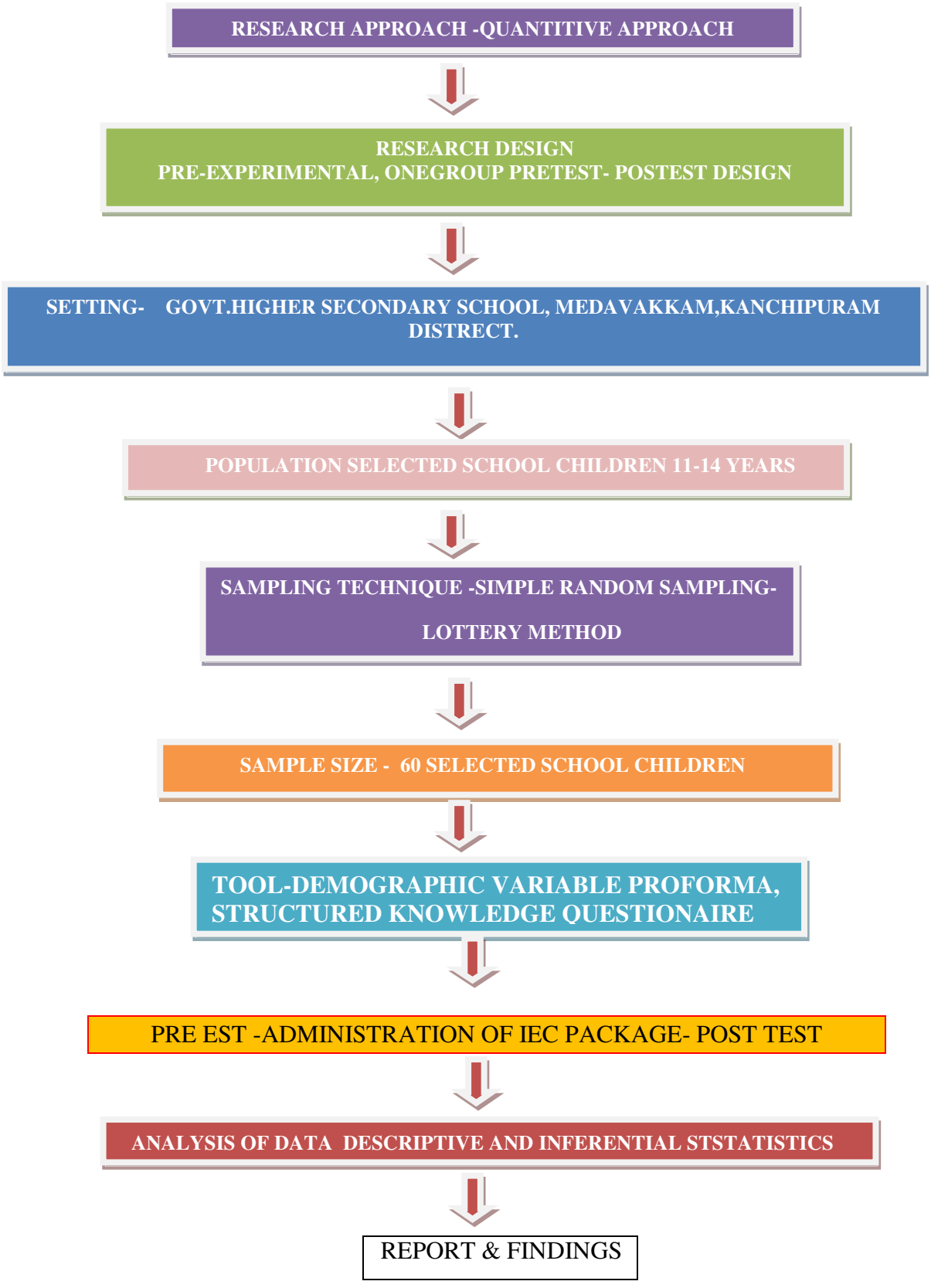


Figure 2.1. Conceptual Framework based on J.W. Kenny's Open System Model

3.1 SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY



பேரிடர் முன்னெச்சரிக்கை நடவடிக்கைகள் பற்றி வடிவமைக்கப்பட்ட நேர்காணல் படிவக் கேள்விகள் இரண்டு பகுதிகளாகப் பிரிக்கப்பட்டுள்ளது

பகுதி – 1

தனிநபர் விவரம்:

இந்தப்பகுதி வயது, பாலினம், கல்வித் தகுதி, வாழும் இடம், குடும்பத்தின் மாத வருமானம், குடும்ப அமைப்பு வகை, தெரிந்த மொழி, குடும்பத்தில் உள்ள மொத்த குழந்தைகளின் எண்ணிக்கை, பேரிடம் பற்றிய முந்தைய அனுபவம் பற்றி விவரங்களைக் கொண்டுள்ளது.

குறிப்பு:

இந்தக் கேள்விகள் அனைத்தும் பேரிடர் முன்னெச்சரிக்கை நடவடிக்கைகள் பற்றியது. இவை ஆராய்ச்சிக்காக மட்டும் பயன்படுத்தப்படும். எனவே, கீழே கொடுக்கப்பட்டுள்ள விடைகளில் சரியான விடையைத் தேர்ந்தெடுக்கவும்.

1) வயது வருடங்களில்

- 1.1 11 வயது ☐
- 1.2 12 வயது ☐
- 1.3 13 வயது ☐
- 1.4 14 வயது ☐

2) பாலினம்

- 2.1 ஆண் ☐
- 2.2 பெண் ☐

3) தற்போதைய கல்வித் தகுதி

- 3.1 6ம் வகுப்பு ☐
- 3.2 7ம் வகுப்பு ☐
- 3.3 8ம் வகுப்பு ☐

4) வாழும் இடம்

- 4.1 நகரம் ☐
- 4.2 கிராமம் ☐

5) குடும்பத்தின் மாத வருமானம் (ரூபாயில்)

5.1 ரூ. ≤ 5000/- ☐

5.2 ரூ.5001/- – ரூ.15000/- ☐

5.3 ரூ. ≥ 15000/- ☐

6) குடும்ப அமைப்பு வகை

6.1 தனிக்குடும்பம் ☐

6.2 கூட்டுக்குடும்பம் ☐

7) தெரிந்த மொழி

7.1 தமிழ் ☐

7.2 ஆங்கிலம் ☐

7.3 தெலுங்கு ☐

7.4 இந்தி ☐

8) குடும்பத்தில் உள்ள மொத்த குழந்தைகளின் எண்ணிக்கை

8.1 1 ☐

8.2 2 ☐

8.3 3 ☐

8.4 4 ☐

9) பேரிடர் மேலாண்மை பற்றிய முந்தைய அனுபவம்

9.1 உண்டு ☐

9.2 இல்லை ☐

10) அறிவைப் பெறுவதற்கான ஊடகமாகக் கருதப்படுவது

10.1 தொலைக்காட்சி ☐

10.2 வானொலி ☐

10.3 நாளிதழ் ☐

10.4 கைப்பேசி ☐

பகுதி – 2

பேரிடர் மேலாண்மை முன்னெச்சரிக்கை நடவடிக்கைகள் குறித்த விழிப்புணர்வு பள்ளிக் குழந்தைகளிடம் உள்ளதா என அறிவதற்கான வினாத் தொகுப்புகளை உள்ளடக்கியது.

நோக்கம்:

இந்த வினாத் தொகுப்பு பேரிடர் மேலாண்மை முன்னெச்சரிக்கை நடவடிக்கைகள் குறித்த விழிப்புணர்வு உள்ளதா என அறிய உதவுகிறது.

குறிப்பு:

கீழ்கண்ட வினாக்களை நன்கு வாசித்து, சரியான பதிலுக்கு நேராக உள்ள கட்டத்தில் சரி (✓) என்ற குறியீட்டை இடவும். ஒவ்வொரு கேள்விக்கும் சரியான விடைக்கு 1 மதிப்பெண்ணும், தவறான விடைக்கு 0 மதிப்பெண்ணும் கொடுக்கப்பட்டுள்ளது. உயர்ந்த மதிப்பெண் – 20.

பொதுவான அறிமுகக் கேள்விகள்:

1) பேரிடரினால் ஏற்படும் மாற்றங்கள்

(அ) அமைப்பு, பொருளாதாரம், கலாச்சாரம் மற்றும் சமயத்துறை சார்ந்த மாற்றங்கள் ☐

(ஆ) வேலை வாய்ப்பை மட்டும் அதிகரிக்கிறது ☐

(இ) பண மதிப்பை மட்டும் மாற்றுகிறது ☐

2) வெள்ளம் எந்த வகை பேரிடரைச் சார்ந்தது

(அ) இயற்கை பேரிடர் ☐

(ஆ) மனிதனால் ஏற்படுத்தப்பட்ட பேரிடர் ☐

(இ) மேற்கண்ட இரண்டும் இல்லை ☐

3) வெள்ளம் ஏற்படுவது எப்பொழுது

(அ) நிலப்பகுதிகளில் நீர்மட்டம் அதிகரிக்கும்பொழுது ☐

(ஆ) நீர்மட்டம் குறையும்பொழுது ☐

(இ) நீர்மட்டம் மிதமான நிலையில் இருக்கும்பொழுது ☐

4) வெள்ளம் ஏற்படுவதற்கான காரணம்

(அ) தொடர்ந்து மழை பெய்வதால் ☐

(ஆ) நல்ல கழிவுநீர்க் கால்வாய் ☐

(இ) ஆற்றினை அகலப்படுத்துவதால் ☐

5) சமீபத்தில் எந்த வகையான வெள்ளத்தைச் சென்னை சந்தித்தது

(அ) ஆற்று வெள்ளம் ☐

(ஆ) கடற்கரை ஓர வெள்ளம் ☐

(இ) நகர்புற வெள்ளம் ☐

6) நகர்ப்புற வெள்ளத்திற்கான காரணம்

(அ) பனிக்கட்டி உருகுவதால் ☐

(ஆ) அணைக்கட்டு உடைபடுவதால் ☐

(இ) போதிய கழிவுநீர்க் கால்வாய் வசதி இன்மையால் ☐

7) உலகளவில், இந்தியாவில் வெள்ளத்தினால் ஏற்படும் இறப்புகளின் பங்கு

(அ) ஐந்தில் ஒரு பங்கு ☐

(ஆ) ஐந்தில் மூன்று பங்கு ☐

(இ) ஐந்தில் இரண்டு பங்கு ☐

8) இந்தியாவில் ------- ஆற்றங்கரை ஓரங்கள் பெரும்பாலும் வெள்ளப் பெருக்கு ஏற்படும் பகுதிகளாகக் கருதப்படுகின்றன.

(அ) கங்கா மற்றும் பிரம்மபுத்திரா ☐

(ஆ) காவேரி மற்றும் யமுனா ☐

(இ) சரஸ்வதி மற்றும் கோதாவரி ☐

9) வெள்ளத்தினால் ஏற்படக் கூடிய விளைவுகள்

(அ) இயற்கை மாற்றம், பயிர்கள் அழிக்கப்படுதல் மற்றும் உணவுப் பொருட்கள் வழங்கலில் குறைபாடுகள் ஏற்படுதல் ☐

(ஆ) வேதியியல் மாற்றங்கள், குறைபாடுகள் ☐

(இ) செடி, கொடிகள் வளர்வதை ஊக்குவிக்கிறது. ☐

வெள்ளம் ஏற்படுவதற்கு முன்

10) அவசர உதவிப் பெட்டியில் இருப்பது

(அ) மருந்துகள், குடி தண்ணீர், உணவுப் பொருட்கள் மற்றும் கைவிளக்கு ☐

(ஆ) காய்கறிகள் ☐

(இ) சிமெண்ட், செங்கல் ☐

11) வெள்ளம் ஏற்படுவதற்கு முன்னால் தயார் நிலையில் வைக்கப்படுவது

(அ) முதலுதவிப் பெட்டி, மருந்து பொருட்கள் மற்றும் உணவுப் பொருட்கள் ☐

(ஆ) குளிர்ந்த நீர், காய்ந்த உணவுப் பொருட்கள் ☐

(இ) தூய்மையற்ற நீர் மற்றும் துணிமணிகள் ☐

வெள்ளத்தின் போது செய்ய வேண்டியவை

12) வெள்ள முன்னெச்சரிக்கையைக் கேட்டவுடன் செய்ய வேண்டிய நடவடிக்கைகள்

(அ) அவசர கால முதலுதவிப் பெட்டி, முன்னெச்சரிக்கை அறிவுரைகளைக் கேட்பது ☐

(ஆ) மின்சாரப் பொருட்களை உபயோகத்தில் வைப்பது ☐

(இ) வாயு அடுப்பை பற்ற வைப்பது ☐

13) ---------- நீரை வெள்ளத்தின்போது குடிக்க வேண்டும்.

(அ) குளிர்ந்த நீர் ☐

(ஆ) வெள்ள நீர் ☐

(இ) கொதிக்க வைத்து ஆற வைத்த நீர் ☐

14) ---------- கெதண்டு சுற்றுப்புறத்தை தூய்மை செய்ய வேண்டும்

(அ) வெள்ள நீர் ☐

(ஆ) சாக்கடை தண்ணீர் ☐

(இ) பிளீச்சிங் பவுடர் மற்றும் எலுமிச்சை ☐

15) வெள்ளத்தின்போது வயிற்றுப் போக்கு ஏற்பட்டால் செய்ய வேண்டியது

(அ) பச்சைத் தண்ணீர் குடித்தல் ☐

(ஆ) அரிசிக் கஞ்சி மற்றும் காய்ச்சி ஆர வைத்த குடிநீர் ☐

(இ) இளநீர் குடித்தல் ☐

16) வெள்ளத்தின்போது உணவுப்பொருட்கள் ----------

(ன) காய்ந்து, உலர்ந்து இருத்தல் வேண்டும். ☐

(னை) மூடி வைக்கப்பட வேண்டும் ☐

(னைை) வயிறு நிறைய உணவு உட்கொள்ளுதல் ☐

17) வெள்ளத்தின்போது ********** வருவது சாதாரணம்

(ன) பாம்புக்கடி ☐

(னை) தேள்கடி ☐

(னைை) பூச்சிக் கடி ☐

<u>வெள்ளம் ஏற்பட்ட பின்</u>

18) வெள்ளத்தினால் பாதிக்கப்பட்ட கட்டிடத்திற்குள் நுழைவதற்கு முன் செய்ய வேண்டியவை

(ன) பாதுகாப்பானதா என்பதை உறுதிபடுத்திக் கொள்ளுதல் ☐

(னை) வெள்ளம் சூழ்ந்திருந்தாலும் கட்டிடத்தினுள் நுழைவது ☐

(னைை) கட்டிட அமைப்பு மற்றும் சேதத்தை கருத்தில் கொள்ள வேண்டும் ☐

19) முக்கியமான முன்னெச்சரிக்கை

(ன) பாதுகாப்பான காலணிகளை அணிதல், வாயுக்கசிவு, மின்கசிவினைக் கண்காணித்தல் ☐

(னை) மின் கலம் (பேட்டரியை) உபயோகிக்கும் விளக்குகளைப் பயன்படுத்துதல் ☐

(னைை) மேற்கண்ட இரண்டும் ☐

20) எதிர்காலத்தில் உடமைகளை பாதிப்பிலிருந்து பாதுகாப்பது எப்படி?

(ன) கட்டிட வரைமுறை விதிகளைப் பின்பற்றுதல் ☐

(னை) அசுத்தமான நீரை உபயோகித்தல் ☐

(னைை) ஈரமாக உள்ள பொருட்களை சுத்தப்படுத்துதல் ☐