



“THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON MANAGEMENT OF EBOLA VIRAL DISEASE AMONG THE STAFF NURSES IN SELECTED HOSPITALS, AT BENGALORE”

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ABSTRACT

BACKGROUND

Ebola viral disease (EVD), formerly known as Ebola hemorrhagic fever is a severe, often fatal illness in humans. Viruses cause a syndrome characterized by multisystem involvement resulting in a damaged vascular system. Although most cases of hemorrhagic fever are severe, some cases are less acute. The viruses as a whole can be found throughout the world however each virus usually causes disease only in its own limited geographic area. The Ebola and Marburg viruses, which both belong to the filovirus family, are the best-known viral hemorrhagic fever viruses.

OBJECTIVES OF THE STUDY

1. To assess the knowledge of Ebola viral disease among the staff nurses.
2. To evaluate the effectiveness of structured teaching program by comparing pre-test and post-test knowledge scores.
3. To implement structured teaching program among the staff nurses.
4. To find the association between pretest knowledge score and selected Demographic variables.

MATERIALS AND METHODS

The conceptual framework for this study was derived from the **General System Theory** proposed by Ludwig Von Bertalanffy (1968). The study involved one group pre test and post test without a control group using pre experimental design, with purposive sampling technique. The pre test was followed by administration of structured teaching program me and post test conducted by using same self administered structured knowledge questionnaire to find out the effectiveness. The results were described by using descriptive and inferential statistics.

RESULTS

Shows that pre-test mean knowledge score obtained by the subjects was 17.08 After administering structured teaching programme post-test mean knowledge score increased to 23.08 and found to be significant at the level of $P < 0.05$, which evidenced that the developed structured teaching programme has increased the knowledge of staff nurse in selected hospital. Hence the research hypothesis stated that there will be significant difference between pre and post-test knowledge scores of staff nurses in selected hospital regarding management of Ebola viral disease were accepted. It is evident that there was no statistically significant association found between the post-test knowledge score of staff nurses with selected demographic variables like age, gender, religion, previous exposure of knowledge on EVD and sources at 0.05 level of significance. Hence the research hypothesis stated that there will be significant association between the pre-test knowledge scores of staff nurses in selected hospital and selected demographic variables was accepted.

CONCLUSION

The present study attempted to assess the effectiveness of structured teaching programme on management of Ebola viral disease among staff nurses in selected hospital, at Bangalore, has found that the developed structured teaching programme was effective in improving the knowledge level of staff nurses regarding management of Ebola viral disease.

KEYWORDS: Ebola virus, management, staff nurses, Effectiveness

INTRODUCTION

“EBOLA VIRUS PUT HUMANITY AT A GREAT RISK. WE MUST ACT NOW TOGETHER TO PREVENT FURTHER CRISIS”

Lailah Gifty

Akita

An individual may not be born with a disease but may be at high of acquiring. Infectious diseases remain a leading cause of morbidity and mortality World Wide. Infectious as growth of microorganisms in an animal with any resulting host response will increase essentially all of the infectious disease of humans. Viral diseases are extremely widespread infection caused by viruses, a type of micro-organism. There are many types of viruses that cause a wide variety of viral diseases. Viral diseases are contagious and spread from person to person, when a virus enters the body and begins to multiply. Viral

disease result in a wide variety of symptoms that vary in character and severity depending on the type of viral infection and other factors, including the person's age and overall health. In some cases, viral diseases can lead to serious possibly life-threatening complications. Ebola viral disease (EVD), formerly known as Ebola hemorrhagic fever is a severe, often fatal illness in humans. Viruses cause a syndrome characterized by multisystem involvement resulting in a damaged vascular system. Although most cases of hemorrhagic fever are severe, some cases are less acute. The viruses as a whole can be found throughout the world however each virus usually causes disease only in its own limited geographic area. The Ebola and Marburg viruses, which both belong to the filovirus family, are the best-known viral hemorrhagic fever viruses. The incubation period of Ebola viral disease (EVD) varies from 2 to 21 days, with an observed average of 8 to 10 days. Indirect contact with environment and fomites soiled with contaminated bodily fluids (e.g. needles) may also transmit the disease. EVD is a painful outbreak anywhere can be a risk everywhere. Although great improvements have been achieved over the past decade, better surveillance, real-time sharing of data and taking rapid action. The spreading of infection can be stopped by an early diagnosis, training, patient isolation, infection control and immediate care.

NEED FOR THE STUDY

The Ebola virus is transmitted to people from wild animals and spreads in the human population through human-to-human transmission. The clinical course differs among patients but often includes fever, hemorrhage, vomiting, diarrhea, cough, and jaundice. Symptoms usually occur rapidly, and the course of the illness often progresses rapidly to profound hemorrhagic organ destruction and shock. The mortality ranges from 25% to 80%. Non-human animals or insects appear to be the natural reservoirs of the viruses. Humans usually become infected when exposed to the natural reservoir—for example, after exposure to an unrecognized host or an insect bite. However, human-to-human transmission occurs occasionally; it involves close contact and usually occurs via the blood-borne route after exposure to blood or other body fluids. WHO aims to prevent Ebola outbreaks by maintaining surveillance for Ebola virus disease and supporting at-risk countries to develop preparedness plans. The document provides overall guidance for control of Ebola. In order to strengthen nurses' willingness to care for EVD-infected patients, education that targets the enhancement of belief in public service should be included in nurse training. Efforts should be directed toward lowering EVD risk perception and developing systematic responses through government-led organized support.

STATEMENT OF THE PROBLEM

“A Study To Assess The Effectiveness Of Structured Teaching Programme On Management Of Ebola Viral Disease Among The Staff Nurses In Selected Hospitals At Bangalore”.

OBJECTIVES OF THE STUDY

5. To assess the knowledge of Ebola viral disease among the staff nurses.
6. To evaluate the effectiveness of structured teaching program by comparing pre-test and post-test knowledge scores.
7. To implement structured teaching program among the staff nurses.
8. To find the association between pretest knowledge score and selected Demographic variables.

HYPOTHESES

H₁There will be significant difference between the pre-test and post-test knowledge on management of Ebola viral disease among the staff nurses in selected hospitals.

H₂There will be significant association between the pretest knowledge scores with the selected demographic variables.

ASSUMPTIONS

- Staff nurses from hospital they may have some knowledge on management of Ebola viral disease.
- Structured teaching program will improve the knowledge on management of Ebola viral disease.

MATERIALS AND METHODS

The study is based on an evaluative approach. Quasi experimental design was used for collection of data. The independent variable refers to the structured teaching programme regarding management of Ebola viral disease and dependent variable is the knowledge level of the staff nurses regarding management of Ebola viral disease.

- Purposive sampling technique was adopted to select samples. The structured knowledge questionnaire on management of Ebola viral disease was developed to collect data. The tool consisted of two parts Part I and Part II.
- **Part I:** Consists of selected demographic variables like age, gender, educational status, religion, residential area, previous exposure of knowledge about Ebola viral disease and sources of information about Ebola viral disease.
- **Part II:** Consists of 32 structured knowledge questionnaires related to Ebola viral disease.

MAJOR FINDINGS OF THE STUDY

Section-I: Demographic variables of old age people

The present study revealed most 50% of the samples belong to the age group of 31-35 years and majority of samples were females, in the study most of the samples 58% of samples were GNM and a maximum samples of 42% belong to Hindu, the similar 42% are Christian most of the samples 75% of them were urban. Majority of the samples were exposure to previous knowledge regarding Ebola viral disease and 42% of samples got knowledge about EVD from media.

Section-II: Knowledge scores of old age people in pre-test and post-test.

The present study reveals that overall mean knowledge score obtained by the samples was 17.08 with a standard deviation of 5.25 in the pre-test and over all mean knowledge score obtained by the samples was 23.08 with a standard deviation of 2.60 in the post test.

Section-III: Effectiveness of structured teaching programme on management of Ebola viral disease

The present study shows that overall mean knowledge score obtained by the samples was 17.08 with a standard deviation of 5.25 in the pre-test and over all mean knowledge score obtained by the samples was 23.08 with a standard deviation of 2.60 in the post test. It is evidenced that developed structured teaching programme was effective in increasing the knowledge of subjects.

Hence the research hypothesis there is no association between the selected demographical variables and pre test knowledge score of staff nurses on management of EVD with selected demographic variables. Here we observe that chi square value is greater than the table value at 5% level of significant expert religion for all the selected demographical variables. So here we reject the null hypothesis.

Section-IV: Association between pre-test knowledge scores with demographic variables of staff nurses

The findings of present study evidents that the obtained chi square value of age 4.148, educational status 5.542, previous knowledge 7.016 are greater than table value, religion 2.447 are lesser than table value. 9.640

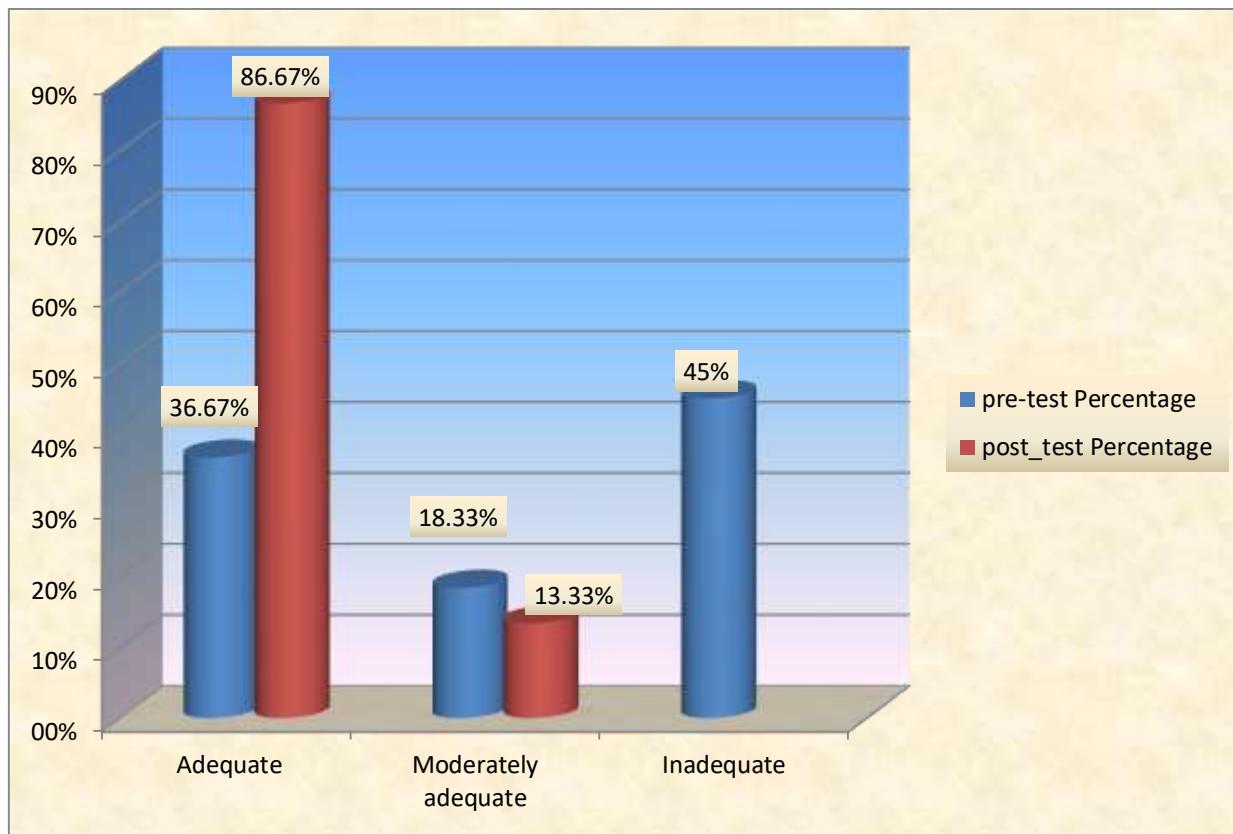
Hence it is evident that the obtained chi-square value of age, education and previous knowledge is significant at 0.05 level of significance and obtained chi-square value of gender, religion and source of information are not significant at 0.05 level of significance.

Table 1: Frequency and percentage distribution of demographic characteristics

No.	VARIABLE	FREQUENCY	PERCENTAGE
1	AGE		
	20-25	15	25
	26-30	15	25
	31-35	30	50
2	GENDER		
	MALE	20	33
	FEMALE	40	68
3	EDUCATIONAL LEVEL		
	ANM	10	17
	GNM	35	58
	BSC	15	25
4	RELIGION		
	HINDU	25	42
	MUSLIM	10	17
	CHIRSTIAN	25	42
5	AREA		
	URBAN	45	75
	RURAL	15	25

6		PREVIOUS KNOWDGE		
		YES	40	68
		NO	20	33
7		SOURCE INFORMATION		
		FAMILY	5	8
		FRIENDS	15	25
		MEDIA	25	42
		HEALTH PERSONAL	15	25

Figure : Comparison of level of overall pre- and post-test knowledge of subjects according to level of knowledge



- The data presented in Table-4 and Figure depicts that in the pre-test, most of subjects(45%) had inadequate knowledge on **Management of Ebola Viral Disease** and 18.33% had moderately adequate followed by 36.67% were adequate knowledge. In case of post-test it was observed that 86.67% of the subjects had adequate knowledge, 13.33% had moderately adequate knowledge on **Management of Ebola Viral Disease**.

Comparison of level of pre-test and post-test knowledge of the subject

Level of Knowledge	pre-test		post-test	
	frequency	Percentage	frequency	Percentage
Adequate	22	36.67	52	86.67
Moderately adequate	11	18.33	8	13.33
Inadequate	27	45	8	
TOTAL	60	100	60	100

Table 2: Reveals that the descriptive statistics i.e., Mean, Standard Deviation and Standard Error of Mean for pre & post test knowledge scores of Staff Nurses on Management of Ebola Viral Disease

	KNOWLEDGE	Mean	Std. Deviation	Std. Error of Mean	Percentage of Mean
Pair 1	POST_TEST	23.08	2.606	0.336	38.47
	PRE_TEST	17.08	5.254	0.678	28.47

The data in Table-2 focuses on Pre & post test of knowledge of **Staff Nurses on Management of Ebola Viral Disease**

The mean percentage of knowledge score was maximum (38.47%) in with Mean \pm SD of 23.08 ± 2.606 in case of post test and minimum (28.47%) was in case of pre-test with Mean \pm SD of 17.08 ± 5.254 .

There is significant difference between Pre- and the post- test for knowledge of Staff Nurses on Management of Ebola Viral Disease. Therefore we conclude that given STP on Management of Ebola Viral Disease was More effective.

DISCUSSION:

Ebola viral is most common type of movement disorder seen in clinical practice. Ebola viral disease is a severe, often disease the humans and nonhuman primates such as monkeys, gorillas and chimpanzees. It is a rare but deadly virus that causes bleeding inside and outside the body. As the virus spreads through the body. It damages the immune system and organ characterized by fever, headache, sore throat, joint and muscle soreness, weakness.

The present study most of the subjects showed inadequate knowledge regarding management of Ebola viral disease, which is indicated by overall mean percentage of 45% and in the post test scores maximum number of subjects has adequate knowledge regarding management of Ebola viral disease, as evidenced by the overall

mean percentage of 86.67% the above results shows that there has been significant improvement in the level of knowledge of staff nurses which indicates that structure teaching programme was effective.

NURSING IMPLICATION

The study has implication in the area of practice, nursing education nursing administration and nursing research

1. Nursing professionals working in the hospital as well as community can understand the importance of health education regarding management of Ebola viral disease.
2. Community nurses play a key role in changing the health education of people towards prevention and thereby improving success rate in early case identification and its treatment.
3. The study reveals the need for correction of the deficiency as an ongoing process.
4. Public awareness is an important factor for achieving health and practicing healthy life style. This study reveals the importance of giving health education and community participation to develop a healthy community.
5. Lectures, discussions, training, workshops, seminars can be conducted on management of Ebola viral disease to improve the knowledge of staff nurses in old age hospital.
6. Nationwide network can be organized to share the knowledge as well as the incidences about Ebola viral disease.

LLIMITATIONS OF THE STUDY

1. The study is limited to staff nurses.
2. Extraneous variables like exposure to media, peer contact were beyond the investigators control.
3. The study did not use any control group. Therefore there are possibilities of threats to internal validity like events occurring between pre test and post test.
4. The study did not include all the staff nurses in all hospital.

CONCLUSION

Ebola viral is most common type of movement disorder seen in clinical practice. It is a rare but deadly virus that causes bleeding inside and outside the body. As the virus spreads through the body. It damages the immune system and organ characterized by fever, headache, sore throat, joint and muscle soreness, weakness. The present study most of the subjects showed inadequate knowledge regarding management of Ebola viral disease, which is indicated by overall mean percentage of 45% and in the post test scores maximum number of subjects has adequate knowledge regarding management of Ebola viral disease, as evidenced by the overall mean percentage of 86.67% the above results shows that there has been significant improvement in the level of knowledge of staff nurses which indicates that structure teaching programme was effective.

REFERENCES:

1. Who gene and human disease; Available from: [www.who.int>genetic diseases>index3](http://www.who.int/genetic_diseases/index3).
2. Viral infection definition-medicine Net-health medical information; Available from: www.Medicine.net.com>main>mobile art.
3. Viraldiseases-symptoms,causes,treatments-
healthgrades; Available from: www.healthgrades.com/conditions/viral-disease
4. Who Ebola viral disease; Available from: <http://www.who.int/mediacentre/factsheets/fs103/en/>
5. “Brunner and suddarth’s”, “Text Book of Medical Surgical Nursing”, 11th edition, Volume2, Published by Lippincott, Wolters Kluwer Page no: 2511-2512.
6. Who Ebola viral disease; Available from: [www.who.int>media cause>factsheets/fs103/en/&ei](http://www.who.int/media_cause>factsheets/fs103/en/&ei)
7. World Health Organisation Fact Sheet; Available From: <https://iwpchi.wordpress.com/2014/10/03/world-health-organisation-fact-sheets-ebola-virus-disease-symptoms-treatments-and-prevention>
8. Indian quarantines man recovering from Ebola\Reuters; Available from: <http://mobile.reuters.com/article>.
9. Ebola in India: 36,400 passengers screened for Ebola, 73 in high risk; Available from: <http://www.india.com/news/Ebola-in-India>.