



KNOWLEDGE REGARDING BASIC LIFE SUPPORT AMONG DRIVERS AT VENJARAMOODU, TVM.

Nursing

Mr. Harikrishna G L Msc (N), MPA, MHA, PGDHSR, PGDHHA, CQAS, CDM Associate Professor, Dept. of Psychiatric Nursing, Sree Gokulam Nursing College, Trivandrum-695607, Kerala.

ABSTRACT

Basic life support (BLS) is a level of medical care which is used for victims of life-threatening illnesses or injuries until they can be given full medical care at a hospital. It can be provided by trained medical personnel, including emergency medical technicians, paramedics, and by qualified bystanders. Adequate knowledge and awareness about BLS and CPR is a vital issue to ensure that individuals can deliver necessary life-saving measures in cases of emergency. The purpose of the study was to assess the knowledge regarding basic life support among drivers at Venjaramoodu, TVM. The objective of the study was to assess the knowledge of drivers on BLS and to determine the association of knowledge among drivers with the selected socio personal variables. The descriptive research approach was used for the study. 106 Drivers were selected using consecutive sampling technique. The data was collected by using a questionnaire. The collected data were analyzed by using descriptive and inferential statistics. 42 (39.6%) of the subjects were in the age group of more than 45 years. All the subjects were males; majority (67%) of the subjects were having secondary education qualification and 84% of the subjects were having the driving experience of more than 5 years and majority (68.9%) of the subjects were auto drivers. 26% of drivers had poor knowledge, 65% had average knowledge and 9% had good knowledge on BLS. There was no significant association between demographic variables with knowledge regarding basic life support.

KEYWORDS

Basic life support, knowledge, drivers

INTRODUCTION

Basic life support (BLS) is a level of medical care which is used for victims of life-threatening illnesses or injuries until they can be given full medical care at a hospital. It can be provided by trained medical personnel, including emergency medical technicians, paramedics, and by qualified bystanders⁽¹⁾

CPR provided in the field increases the time available for higher medical responders to arrive and provide ALS care. An important advance in providing BLS is the availability of the automated external defibrillator or AED. This improves survival outcomes in cardiac arrest cases⁽²⁾

Road traffic accident and sudden cardiac arrest are one of the most leading causes of death. Basic life support (BLS) is lifesaving intervention as a premedical facility. Adequate knowledge and awareness about BLS and CPR are mandatory for everyone⁽³⁾. Adequate knowledge and awareness about BLS and CPR is a vital issue to ensure that individuals can deliver necessary life-saving measures in cases of emergency⁽⁴⁾

The National Crime Records Bureau (NCRB) 2016 report states there were 496,762 roads, railways and railway crossing-related traffic accidents in 2015. Of these, road accidents accounted for 464,674 accidents which caused 148,707 traffic-related deaths in India. The three highest total numbers of fatalities were reported in Uttar Pradesh, Maharashtra and Tamil Nadu, and together they accounted for about 33% of total Indian traffic fatalities in 2015. Adjusted for 182.45 million vehicles and its 1.31 billion populations, India reported a traffic accident rate of about 0.8 per 1000 vehicles in 2015 compared to 0.9 per 1000 vehicles in 2012, and an 11.35 fatality rate per 100,000 people in 2015⁽⁵⁾

During 2018, 31,611 persons suffered serious injuries, while in 2017, the number stood at 29,733. In 2018, Kerala's roads saw 4,259 deaths, 31,687 grievous injuries, and 13,456 simple injuries in 40,260 accidents. About 82% of the 4,259 deaths due to road accidents in involve motorcyclists (2,178 deaths, 53%) and pedestrians (1,200 deaths, 29 %). Car occupants account for 7% (289 deaths), auto-rickshaw drivers and passengers 4.5% (188 deaths) and heavy vehicles 3% (134 deaths). Ernakulam district has topped the districts with 5,976 accidents, followed by Thiruvananthapuram with 5,608 accidents and Thrissur with 4,444 accidents. In fatalities, Thiruvananthapuram is on top with 496 deaths, Ernakulam in second place with 440 deaths, followed by Kollam (435) and Thrissur (422). Most of the victims fall in the productive age group of 18 to 40 years⁽⁶⁾

Providing BLS and CPR during the golden hour can help in preventing pre hospital deaths from injuries as well as heart attack if there is a

delay in receiving hospital treatment or medical care. Mostly, the steps we take in haste while attending to an emergency, makes a deep-rooted impact in saving the life of the patient. Thus, it is vital for all to learn the BLS and CPR techniques, so that we can take the right measures when required. Thus this study was undertaken to assess the knowledge of jeep, auto, and taxi drivers regarding BLS as these groups are available at road side and always being as first responders.

MATERIALS & METHODS

A quantitative non experimental research approach with a descriptive design was used to conduct the study. The study was conducted in jeep, auto, and taxi stand at Venjaramoodu, Trivandrum district. The purpose of the study was explained, confidentiality was assured and maintained and written informed consent was obtained from each subject. The sample of the present study constituted of all jeep, auto, and taxi drivers at Venjaramoodu who were recruited by total enumeration sampling. By applying, $(4SD)^2/d^2$ 99 samples that fulfilled the inclusion criteria were recruited for the study. The samples selected for the present study is 106.

The tools used for the study has 2 parts. Part A includes demographic Performa which includes age, gender, education, year of experience, type of vehicle, and previous experience on BLS.

Part B is Questionnaire for assessing the knowledge regarding BLS was prepared by the investigators. It consists of 15 items with correct responses as 1 mark and wrong responses as 0.

Grading of tool:

1-5 - poor
6-10- Average

11-15- Good. Reliability of the tool was assessed using test re test method and the reliability coefficient, $r=0.87$ and the content validity were done by experts in the field.

Data collection was done during a single session lasting for 20-30 minutes. This was followed by giving hands on training with instructional module. Socio demographic variables were presented with appropriate descriptive statistics. Chi-square test was used to find out the association between selected variables and knowledge regarding BLS. The Statistical Software SPSS for windows (version 16.0) was employed for the analysis of data.

RESULTS:

39.6% of the subjects were in the age group of more than 45 years. All the subjects were males; majority (67%) of the subjects were having secondary education qualification and 84% of the subjects were having the driving experience of more than 5 years and majority (68.9%) of

the subjects were auto drivers. Majority (53.8%) of the subjects had no previous training experience on BLS.

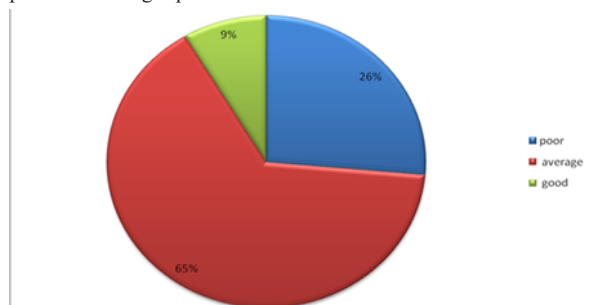


Figure 1: Level of knowledge on BLS among drivers.

Figure 1 showed that about 26% of drivers had poor knowledge, 65% had average knowledge and 9% had good knowledge on BLS.

There was no significant association between demographic variables with knowledge regarding basic life support.

Instructional module in Malayalam was prepared and validated by giving to 5 experts. After providing hands on training, instructional module was given to them.

DISCUSSION

The present study revealed that the majority of the subjects (65%) were having average knowledge about BLS, (26%) of drivers had poor knowledge, and only (9%) had good knowledge on BLS. The average level of knowledge among majority of the drivers may be due to lack of training programme.

The findings of the present study are contradictory to the findings of study conducted by Samiha Jarrahin in 2018 among general public. The study showed that 37% of samples had good knowledge on BLS.

Implication for nursing education

- Incorporating first responder training programs for public should be included in curriculum.
- Include project regarding community capacity building on life saving measures

Implication for nursing practice

- Role plays and training programs can be arranged at community level for drivers.
- Video assisted training programs can be arranged for drivers.

Implication for nursing research

- More studies can be done to assess the knowledge, awareness and attitude regarding BLS and training sessions could be provided to the public.
- Development of mobile applications on video assisted training on BLS

Limitations:

- The study was conducted in a single setting; hence the generalization of the study is limited to that setting only.
- Incomplete filling of the tool by the subjects, due to their hectic work.
- Considering the educational background of the drivers it is possible that the tool used in the study may not have fully captured all the relevant aspects of BLS.
- Lack of co operation from the drivers, due to their busy work schedule, poor attitude, lack of knowledge regarding the importance of BLS in day today life.

CONCLUSION

Road traffic accident and sudden cardiac arrest are one of the most leading causes of death. Basic life support (BLS) is lifesaving intervention as a premedical facility. Adequate knowledge and awareness about BLS and CPR are mandatory for everyone especially drivers who could be the first responders in such situations. Our study findings revealed that about (65%) of the study subjects had average knowledge on BLS.

More research is needed for nurses to assess knowledge regarding BLS

and provide training to the public regarding the same. Increasing the knowledge regarding BLS among the drivers who could be the first responders will require further research. The knowledge regarding BLS may vary depending on educational background and previous training experience, thus making it necessary to design adequate strategies.

REFERENCES

1. https://en.m.wikipedia.org/wiki/Basic_life_support
2. https://en.m.wikipedia.org/wiki/Basic_life_support
3. Handley JA, Colchester, Essex CO4 5JL (Br. J. Anaesth. 1997; 79: 151ñ158). Basic life support
4. Bhanji F., Donoghue A. J., Wolff M. S., et al. Part 14: Education: 2015 American Heart Association guidelines update for cardiopulmonary resuscitation and emergency cardiovascular care. *Circulation*. 2015;132(18):S561–S573. doi: 10.1161/ CIR. 0000000000000268. [PubMed] [CrossRef]
5. <http://www.indiaenvironmentportal.org.in/content/459084/road-accidents-in-india-2017/>
6. <https://www.thehindu.com/news/national/kerala/when-roads-wreak-devastation/article26485839.ece>