ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 12, Issue, 12, pp.15292-15297, December, 2020

DOI: https://doi.org/10.24941/ijcr.40338.12.2020

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF ROAD TRAFFIC ACCIDENTS AMONG SCHOOL CHILDREN AT SELECTED VILLAGES OF BANGARUPALEM (MANDAL) CHITTOOR(DIST)

[1]Dr. A. Padmaja, [2*]Saravana and [3]Dr. Sudha Rani, P.

[1]Professor and HOD Department of child Health Nursing, College of Nursing, Sri Venkateshwara Institute of Medical Sciences, Tirupathi-517507, Chittoor-Dist, Andhra Pradesh, India
[2]M.SC Nursing Student, Department of Child Health Nursing, College of Nursing, Sri Venkateshwara Institute of Medical Sciences, Tirupathi
[3]Professor I/C Principal, College of Nursing, Sri Venkateshwara Institute Of Medical Sciences, Tirupathi-517507, Chittoor- Dist, Andhra Pradesh, India

ARTICLE INFO

Article History:
Received 30th September, 2020
Received in revised form
27th October, 2020
Accepted 25th November, 2020
Published online 30th December, 2020

Key Words:
Selected Villages of
Bangarupalem Mandel Chittoor (dt).

ABSTRACT

Introduction: Road accidents are one of the major causes of death, injury and disability in all over the world both in developed and developing countries. With a broad estimate, in every 1 min, 2 people are killed and 95 people are severely injured or permanently disabled in traffic accidents worldwide. Traffic accident related deaths and injuries result in not only substantial economic losses but also serious physical and mental sufferings. Developing countries are much more affected from traffic accidents than developed countries. According to the world health organization (WHO) statistics, 75% of deaths resulted from traffic accidents occurring in developing countries. **Methodology:** Quantative research approach was adopted to achieve the objectives of the study. Which was felt to be most appropriate for its practicability in real life situation. it has the advantages of practicability, feasibility and to a certain extent of for generalization. Research design was one group pre test post-test design. The study was conducted in selected villages of bangarupalem (m) Chittoor (dt). Population includes male and female students studying 9th and 10th class selected villages in bangarupalem (m) Chittoor(dt). Sample size consists of 60 school children 9male and female) under inclusion criteria. Non probability convenient sampling technique was adopted for the present study based on inclusion criteria.

Results:

- In pre-test knowledge levels regarding road traffic accidents 40(66.70%) school children have inadequate knowledge12 (20 %) of school children have moderately adequate knowledge only 8(13.30%) of school children have adequate knowledge.
- In post- test knowledge levels regarding road traffic accidents43 (68.30%) school children have adequate knowledge o17 (28.30%) of school children have moderately adequate knowledge.
- In pre -test there was significant association between knowledge on prevention of road traffic accidents age, occupation of mother occupation of father monthly family income educational status of mother and father gender area of residence family income per month <0.01 Level and how many times seen the accidents at p< 0.05evel
- there was no significant association found between knowledge on prevention of road traffic accidents with the religion, source of information how many times seen the road traffic accidents.
- In post-test here was significant association between knowledge on prevention of road traffic accidents with age of the school children educational status of mother, and gender at p< 0.01 and how many times seen the road traffic accidents family income per month at p<0.05
- In post -test there was no significant association was found between knowledge on prevention of road traffic accidents age of the school children religion educational status of father occupation of mother and father, family income per month place of residence how many times seen the road traffic accidents and source of information

Conclusion; The study findings revealed that among 60 school children age group of 14-15 years majority of 40(66.70%) school children have inadequate knowledge12 (20 %) of school children have moderately adequate knowledge only 8(13.30%) of school children have adequate knowledge in pre-test. Based on this structure teaching programme was given on prevention of road traffic accidents which helped the school children to improve level of knowledge regarding road traffic accidents. After health education majority of school children 43 (68.30%) were had adequate knowledge o17 (28.30%) of school children have moderately adequate knowledge. It is responsibility of nursing professionals to educate the school children's regarding prevention of road traffic accidents they can assist themselves and others.

Citation: ***Dr. Padmaja, A., Saravana and Dr. Sudha Rani, P.*** **2020.** "Effectiveness of structured teaching programme on knowledge regarding prevention of road traffic accidents among school children at selected villages of bangarupalem (mandal) chittoor(dist)", *International Journal of Current Research*, 12, (12), 15292-15297.

INTRODUCTION

Road traffic crashes occur on all continents and in every country ofthe world. Every year they take the lives of more than a million people andincapacitate many millions more. Pedestrians, users of non-motorizedvehicles–including bicycles, rickshaws, carts and motor cyclists in lowincome and middle–income countries carry a large proportion of the globalburden of road traffic death and serious injury[2].Every person who is involved in an accident is to be charged undersection 279, 337 and 338 of the Indian penal code and the person if foundguilty in this regard, is fined by the court a maximum amount of 2500 rupees.It is to be noted that the Indian penal code was enacted in the year 1860 andthe fine above mentioned was prescribed that year and has not at all beenmodified till date. Another reason is that almost all the vehicles are insuredand the driver is aware that he is not at all liable for any compensation againstthe injured. It can be compensated by levying a portion of the burden on thepart of the driver and the owner by the courts strictly.

India is estimated to have the second highest number of roadaccidents in a year, according to World Road Statistics (WRS) 2010 data. It issaid that in India the total number of people killed in road accidents was 94, 985, next only to China where 98,738 people were killed. In developing Accident is unintended injury, death or property damage occurring in a sequence of events. Accidents do not just happen; they are thoughtlessness, carelessness, negligence and momentary lack of concentration. Accidents (RTAs) have become a major cause of morbidity and mortality, especially among the adults and middle-aged individuals (Sudhir, 2008). Children's desire to explore can lead them into danger. Children are more likely to be injured close to home, often in their own street or driveway. Bicycle crashes are seen in children below the age group of 15 years. From different literatures it is seen that children between 10-15 years' experience road traffic accidents more and seek medical assistance for fractures, sprains, open wounds etc. The school child develops a sense of industry and learns the basic skills needed to function in the society. During the school years, co-ordination improves and also develops a sense of balance and rhythm allows without knowing the traffic rules and regulation. Thus expose themselves to such hazards. They have to be taught, trained and sensitized to trauma rules and accidents to reduce the incidence of road traffic accidents and in turn reduce morbidity and mortality rates. Road users everywhere deserve better and safer road travel. If we expect to prevent and control this global epidemic, we must use effective strategies simultaneously to address changes in the road and transportation systems, to address vehicle safety, and to address the personal behaviors of drivers, passengers, pedestrians, cyclists and decision makers (Trends in nursing administration, 2008).

NEED FOR THE STUDY: Children less than 15 years have a limited ability to cope with traffic and are disproportionately represented in deaths involving pedestrians. It has been estimated that one million deaths and 15 million road side accidents occur on roads worldwide every year, it was estimated that occur 75% of road side accidents occur in developing countries, which involves 65% pedestrians and 35% of school children. The number of recorded road deaths in India – 1, 40,000 annually is the higher in the world.

In addition as estimated 2.2 million people are seriously injured on road. According to WHO, the death rate due to RTAs road from 16.8 / 100,000 in 2011 to 18.9 / 100,000 in 2014. Number of deaths and injuries due to Road traffic Accidents in India between the years 2005 to 2014 raised by 5.8% and 2.4% respectively. In the year 2014, 1, 41,526 Road traffic accidents were reported in India. The Global status report on road safety 2013 estimates that more than 231 000 people are killed in road traffic crashes in India every year. Approximately half of all deaths on the country's roads are among vulnerable road users - motorcyclists, pedestrians and cyclists. A heterogeneous traffic mix that includes high-speed vehicles sharing the road space with vulnerable road users as well as unsafe road infrastructure and vehicles that are in poor condition all contribute to the high fatality rates seen on India's roads. India is one of the countries included in the Bloomberg Philanthropies Global Road Safety Programme which is being conducted over five years (2010-2014) by a consortium of international partners together with national governments and local organizations. Road accidents in Andhra Pradesh 84%of road accidents occur due to over speeding with lax enforcement being identified as a major culprit. Dr.baluja added that IRTE, in partnership with the ministry of road transport & highways, according to him about 10,000 school children below the age of 18 are dying in road accidents every year in all means of transport including buses two wheels and auto rickshaws.

A total of 4,81,874 traffic accidents were reported in 53 cities during 2014, In 4,81,874 traffic accidents caused injuries to 4,72,523 persons and 1,17,416 deaths. In that Tamilnadu (67,250 cases) followed by Maharashtra (44,382 cases), Karnataka (43,694 cases), Madhya Pradesh (39,698 cases), and Kerala (35,872 cases) have reported the maximum number of road accidents accounting for 14.9%, 9.8%, 9.7%, 8.8%, and 8% respectively of such accidents in the country. The percentage share of deaths in traffic accidents due to "Road Accidents" was reported was 83.7% (1, 41,526 deaths) out of the total RTAS, the proportion of fatal ones have increased from 18.1% to 24.4% from the year 2000 to 2011 also the casualties have increased by 1.3% in the year 2014 compared to 2013.Most of road accidents were due to over speeding accounting for 36.8% total accidents, which caused 48,654 deaths and 1, 81,582 persons injured. Dangerous /careless driving or overtaking caused 1, 37,808 road accidents which rendered 48, 127 deaths and 1, 38,533 persons injured during 2014, besides 3.2% of road accidents were due to poor weather conditions.

MATERIALS AND METHODS

Research Approach: Quantitative research approach was selected for this study.

RESEARCH DESIGN: The research design adapted in this study was one group pre - test post -test pre-experimental design.

O1-X-O2
O1- Pre-test
X- Intervention (structured teaching programme) O2-Post test

VARIABLES OF THE STUDY

- **Independent variable;** knowledge on prevention of road traffic accidents among school children
- **Dependent variable;** 14 – 15 years school children
- **Extraneous variables;**
- Age sex
- Educational qualification
- Family income
- Exposure to mass media
- Previous knowledge on road traffic accidents

SETTING OF THE STUDY: The setting of the study was conducted at selected villages of bamgarupalem (M) Chittoor (DT).

POPULATION: The population includes school age belongs to age group of 14 years and 15 years children.

SAMPLE SIZE: The sample size consists of 60 school children.

SAMPLING TECHNIQUE: Simple random technique

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria

- school children who are willing to participate in the study
- school children who are available during the period of data collection
- School children who are able to communicate in Telugu or English.

Exclusion criteria

- school children who don't know Telugu or English
- School children who already faced road traffic accident
- Mentally retarded children.

DEVELOPMENT AND DESCRIPTION OF THE TOOL: The tool was developed with the help of related literature from journals, websites, discussion and guidance from the experts in the field of nursing and medicine. The tool consists of three sections

SECTION 1: consists of Socio-demographic data.

SECTION 2: Questionnaire consists of 10 questions to assess the level of knowledge regarding prevention of road traffic accidents in school children.

SECTION 3: questionnaire consists of 15 questions to assess the level of knowledge regarding. Prevention of road traffic accidents in school children.

SCORING INTERPRETATION: Scoring key was prepared for

Section 1: consists of demographic variables

Section 2: Each question has minimum 4 options. Each right answer carries '1' mark, each wrong answer carries '0' total score was

<50% Inadequate knowledge
51-75% Moderate knowledge
>75% Adequate knowledge

STRUCTURED TEACHING PROGRAMME: After obtaining the expert suggestions, advice, journals, text books, net resources and videos the structured teaching programme final draft was prepared. It consists of information regarding definition causes, types of road traffic accidents, first aid for road traffic accidents and prevention of road traffic accidents.

CONTENT VALIDITY; Content validity was obtained for the questionnaire from 10 experts: 2 in the field of pediatric medicine, 8 in the field of nursing. Accordingly, necessary modifications were incorporated in the tool.

RELIABILITY OF THE TOOL; The reliability of the tool was established by administering the tool to 6 members of school age children in N. koturu village, bangarupalem (M), Chittoor (DT). who were not included in the main study. The reliability was established by Guttmann split half formula and spearman-brown equal and unequal length formula. The tool was reliable with the score of r= 0.866.

PILOT STUDY: Pilot study was conducted in N. Koturu (village), bangarupalem (M), Chittoor (DT). Prior permission was obtained from child development officer, bangarupalem for conducting the study. 6 school age children who fulfilled the inclusion criteria were selected by convenient sampling technique.

Rapport was established with self-introduction to the school age children and a written consent was obtained from the participants to participate in the study. Investigator collected the data by self-administered questionnaire and structured teaching program me was given on 20/3/20, after 7 days that is on 27/3/20 same school children were given Post-test. Statistical analysis was done by using descriptive and inferential statistics. The findings of the study revealed that the tool was reliable and feasible to conduct the study.

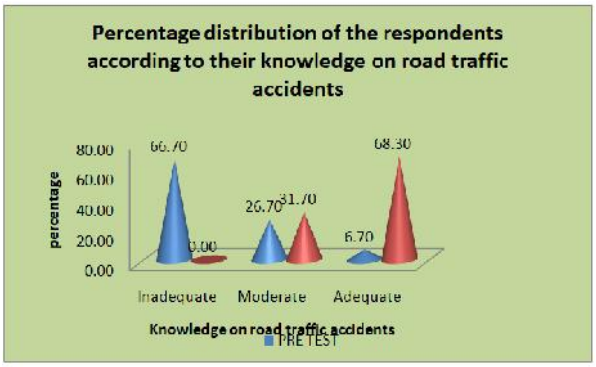
PROCEDURE FOR DATA COLLECTION: Final permission was obtained from the authority to conduct the study at selected villages of Bangarupalem (M), Chittoor (DT). The Investigator initially established rapport with the study subjects and explained the purpose of the study. Consent from the subjects was obtained and confidentiality was maintained throughout the study.

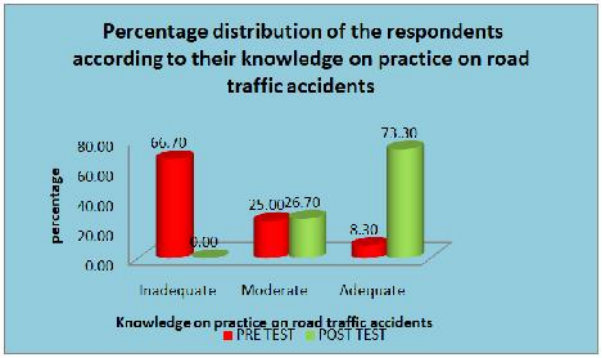
The investigator collected the data by self-administered questionnaire in pre-test between 10 am -11am from 15-18 participants per day. After completion of data collection structured teaching programme was given for 40 minutes between 11.20am - 12 noon on the same day. After 6 days of pre-test and structured teaching programme, post-test was conducted to the same school children by self-administered questionnaire and thanked the participants for their cooperation administered questionnaire and thanked the participants for their cooperation.

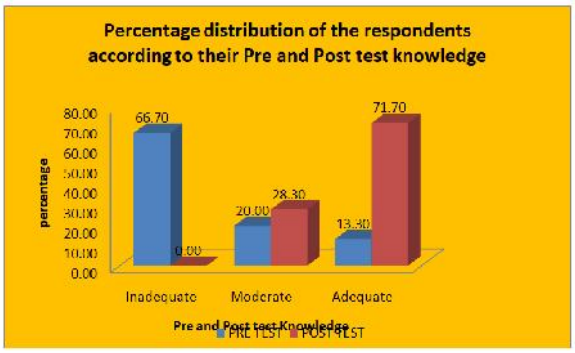
Data collection procedure schedule

Groups	Pre-test including demographic variables		Structured teaching programme		Post test	
	Date	Time	Date	Time	Date	Time
Group -I	01-04-2020	10.00AM-1PM 2PM-5.45PM	03-04-2020	9.00AM-9.45AM	10-04-2020	9.00AM-12.00PM 2.00PM-4.00PM
Group -II	03-04-2020	10.00AM-1PM 2PM-5.45PM	04-04-2020	9.00AM-9.45AM	13-04-2020	9.00AM-12.00PM 2.00PM-4.00PM
Group -III	04-04-2020	10.00AM-1PM 2PM-5.45PM	06-04-2020	9.00AM-9.45AM	15-04-2020	9.00AM-12.00PM 2.00PM-4.00PM
Group -IV	06-04-2020	10.00AM-1PM 2PM-5.45PM	07-04-2020	9.00AM-9.45AM	17-04-2020	9.00AM-12.00PM 2.00PM-4.00PM
Group -V	07-04-2020	10.00AM-1PM 2PM-5.45PM	08-04-2020	9.00AM-9.45AM	18-04-2020	9.00AM-12.00PM 2.00PM-4.00PM
Group -VI	08-04-2020	10.00AM-1PM 2PM-5.45PM	09-04-2020	9.00AM-9.45AM	20-04-2020	9.00AM-12.00PM 2.00PM-4.00PM

RESULTS







DISCUSSION

A sample of 60 school children were selected by simple random sampling technique. A structured questionnaire was used to assess the level of knowledge on prevention of road traffic accidents.

The first objective of the study was to assess the knowledge of school children regarding road safety measures among school children age group of 14-15 years: The pretest was conducted by using questionnaire. The present study reveals that 66.70% school children have inadequate knowledge 26.705 of school children have moderately adequate knowledge only 6.70 % of school children have adequate knowledge.

The second objective of the study was to determine the effectiveness of health education regarding road safety measures among school children: The present study shows that o% of children have inadequate knowledge 31.70% of school children have moderately in adequate knowledge 68.30% of school children have adequate knowledge. The present study shows that 66.70% of school children have inadequate knowledge on practice regarding road traffic accidents 25% of school children have moderately inadequate 8.30 %of school children have adequate knowledge on practice regarding road traffic accidents. The data shows that 0 % of school children have inadequate knowledge on practice regarding road traffic accidents 26.70% of school children have moderately inadequate 73.30%of school children have adequate knowledge on practice regarding road traffic accidents

The third objective of the study was to find out association between the knowledge regarding road safety measures with selected demographic variables: There was level of there was significant association between knowledge on prevention of road traffic accidents age, occupation of mother occupation of father monthly family income educational status of mother and father gender area of residence family income per month <0.01 Level and how many times seen the accidents at p< 0.05evel. There was no significant association found between knowledge on prevention of road traffic accidents with the religion, source of information how many times seen the road traffic accidents in pre-test. There was significant association between knowledge on prevention of road traffic accidents with age of the school children educational status of mother, and gender at p< 0.01 and how many times seen the road traffic accidents family income per month at p<0.05 level in post-test.

Conclusion

- In pre-test knowledge levels regarding road traffic accidents 40(66.70%) school children have inadequate

knowledge12 (20 %) of school children have moderately adequate knowledge only 8(13.30%) of school children have adequate knowledge.

- In post- test knowledge levels regarding road traffic accidents43 (68.30%) school children have adequate knowledge o17 (28.30%) of school children have moderately adequate knowledge.
- In pre -test there was significant association between knowledge on prevention of road traffic accidents age, occupation of mother occupation of father monthly family income educational status of mother and father gender area of residence family income per month <0.01 Level and how many times seen the accidents at p< 0.05evel
- there was no significant association found between knowledge on prevention of road traffic accidents with the religion, source of information how many times seen the road traffic accidents.
- In post-test here was significant association between knowledge on prevention of road traffic accidents with age of the school children educational status of mother, and gender at p< 0.01 and how many times seen the road traffic accidents family income per month at p<0.05
- In post -test there was no significant association was found between knowledge on prevention of road traffic accidents age of the school children religion educational status of father occupation of mother and father, family income per month place of residence how many times seen the road traffic accidents and source of information

Acknowledgement

With great respect and immense pleasure, I express my sincere, whole hearted gratitude, profound and heartfelt thanks to my guide Dr. A. PADAMAJA, M.A(PSY)., M.Sc (N).,Ph.D., Professor & Vice principal I/C child health nursing, college of nursing, SVIMS, tirupati. Her inspiration, unflinching support, sustained patience, valuable and thought-provoking suggestions, expert guidance helped me a lot in the successful completion of this dissertation work.

REFERENCES

Parul Dutta. 2009. paediatric Nursing. New Delhi: Jaypee brothers' medical publication. Page no 132

Parks text book of preventive and social medicine bhanot publishers page no. 340-344

Kozier & erbs fundamentals of nursing 8th edition dorlingkindrly publisher's pvt ltd page no.928

Dr. A. Padmaja text book of child health nursing Jaypee publishers page no.163

Lewis text book of medical surgical nursing 7th edition Elsevier publishers. page no. 1630

Bhaskara ekakkuvana 2011 nursing theories a practical view Haryana jaypee publications p.no. 230

Suresh.k Sharma nursing research and statistics p.no. 85 -87

Rimple Sharma 2013 essentials of paediatric nursing Haryana 2nd edition jaypee publications p.no. 600-618

Baser m., etal 2007 evaluating first aid and knowledge attitudes for furkish primary school teaches emergency nursing p.no. 33, 428-438.

Lamb, R. 2006. The life skills program, Journal of injury prevention, P.no 12, 161 165.

Traffic Accident among male students in a selected college at Guntur, International Journal of Research in Humanities Art and Literature, p.no. 3, 83-86.

Alissa, A. 2006. Road traffic injuries: a descriptive analysis of cases received at the emergency department/King Hussein Medical Centre, Journal of Research in Medical Science. P.no.13, 35-38.

Artemio, L. 2011. Child-to-child school health program CtC SHP. Its impact on the oral health behavior of grade 1 pupils in the division of La Union, Philippines Journal of the National Institute of Public Health, p.no 60,44 -49.

B.T Basavanthappa, 2003 community health nursing jaypeebrother's publication

Parul Datta. 2009. paediatric Nursing. New Delhi: Jaypee brothers' medical publication. Page no 132

Popli and Sharma. 2007. Emergency First Aid Safety Oriented. New Delhi: CBS.

Randhawa. 2012. First Aid and Personal Hygiene. Jalandhar City: S.Vikas and Company Medical Publishers

Rao Sunder S et.al 2005. An Introduction to Biostatistics. Vellore: Presto graphic printers.

19.Rao Visveswaraya K. 2009. Biostatistics: a manual of statistical methods. New Delhi: Jaypee Brothers Medical publishers.

Rimple Sharma.2013.Essentials of paediatric Nursing. Haryana: Jaypee brothers.

Satyanarayana. 2006. Biostatistics. New Delhi: Practice Hall of India PVT Limited.

Shabeer, Basheer. 2013. A Concise Text Book of Advanced Nursing Practice. Bangalore: EMMESS medical publishers.

Shashank, V. Parulekar. 2004. First Aid. Mumbai: Vora medical publication

Soni Samta. 2013. Textbook of Advanced Nursing Practice. Haryana: Jaypee brothers' medical publication.

Sundar Rao. 2006. Introduction to biostatistics and research method. New Delhi: Prentice Hall of India.

Suresh, Kshama. 2011. Nursing Research and Statistics. Haryana: Elsevier.

Tambulwadkar. 2005. paediatric Nursing. Mumbai: Vora medical publication.

Tyreece. 2005. Elements of Research in Nursing. New Delhi: All India Publishers and Distributors.

Yalayyaswamy. 2012. First Aid and Emergency Nursing. Delhi: CBS.

Textbook of Paediatrics. Hyderabad: Universities press.

Assume Beevi. 2010. Textbook of Paediatric Nursing. Haryana: Elsevier publication.

Bala 2007. Fundamentals of Biostatistics. New Delhi: Anne publications.

Basavanthappa, B.T. 2007. Nursing Research. New Delhi: Jaypee brothers medical publication.

Bhaskar a elakkuvana. 2011. Nursing Theories A Practical View. Haryana: Jaypee brothers medical publication.

Bowden, Vicky. R. 2012. Paediatric Nursing Procedure. China

Textbook of Medical- Surgical Nursing II. New Delhi:

Denise, F. Polit. 2010. Essentials of Nursing research ± Appraising Evidence for Nursing Practice. New Delhi:

Fain A. James. 2009. Reading, Understanding and Applying Nursing Research. New Delhi:Jaypee publishers.

Fawcett Jacqueline. 2005. Analysis and Evaluation of Nursing Theories. Philadelphia: F.A Davis Company publishers.

Gupta L.C. 2005. Manual of First Aid Management of General Injuries, Sports Injuries and common Aliments. New Delhi: Jaypee Brothers Medical Publication.

Gupte Suraj. 2009. The Short Textbook of pediatrics'. New Delhi: Jaypee brothers Medical Publication.

Indrani T.K. 2003. First Aid for Nurses. New Delhi: Jaypee brothers Medical Publication.

Jessie M Chellappa. 2000. paediatric Nursing. Bangalore: Gajanan Book Publishers.

Jitendra P Vij. 2003. First Aid for Nurses. Noida: Jaypee Brothers Medical Publication.

Joyce J Fitz Patrick. 2005 Conceptual models of nursing ± Analysis and Application. Maryland:

Julia. B. George. 1995. Nursing Theories. Philadelphia: Mosby Company.

Kyle Terri. 2013. Essentials of paediatric Nursing. Philadelphia: LWW

Leslie Nicoll, H. 1992. Perspective of nursing theory. Philadelphia: J. P Lippincott publisher. Medical & Surgical Nursing. New Delhi: Elsevier.

Maheshwari Loganathan. 2012. Essentials of First Aid for Nursing. Haryana: Jaypee brothers Publication.

Nancy Burns. 2009. The Practice of Nursing Research. Missouri: Saunders publications.

https://www.yourdictionary.com/road-traffic-accident

https://en.m.wikipedia.org/wiki/Traffic_collision

https://ijneronline.com/AbstractView.aspx?PID=2018-6-4-11

ww.google.com

****