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A STUDY TO ASSESS THE KNOWLEDGE REGARDING THE ROAD TRAFFIC SIGNALS AMONG MIDDLE ADOLESCENTS IN SELECTED JUNIOR COLLEGES OF URBAN AREAS

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ABSTRACT

Comparative study to assess the knowledge regarding the road traffic signals. To evaluate the knowledge based on the road traffic signals among the male and female middle adolescents in selected junior colleges, a group pre-test design was chosen for the present study and it conducted in selected junior colleges of urban areas 100 samples were selected for the study (50 male, 50 Female). For the knowledge assessment structure and pictorial questionnaires were used. After the pre-test investigator gave the knowledge on the road traffic signals to the male and female middle adolescents, with using same knowledge questionnaire to evaluate the knowledge regarding the road traffic signals. Analysis of data showed that there is significant difference between pre-test knowledge as well as compare the knowledge of male and female middle adolescents of the structured and pictorial questionnaires. Finding: - The comparisons of the pre-test means of the knowledge of males were done by the paired t test. The pre-test average score was 5.94 with standard deviation of 0.95. The post-test average score was 7.36 with standard deviation of 0.56. The test statistics value of the paired t test was 10.57 with p value 0.00. The comparisons of the pre-test and post-test means of the knowledge of females were done by the paired t test. The pre-test average score was 6.04 with standard deviation of 0.72. The post-test average score was 7.40 with standard deviation of 0.6. The test statistics value of the paired t test was 11.99 with p value 0.00. The comparisons of the post-test means of the knowledge of males and females were done by the unpaired t test. The post-test average score for males was 7.36 with standard deviation of 0.56. The post-test average score of females was 7.40 with standard deviation of 0.6. The test statistics value of the unpaired t test was 0.34 with p value 0.73.

Keywords: - Road Traffic Signals, Knowledge, Assessment, Middle Adolescents, Junior Colleges, Urban Areas

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INTRODUCTION

Traffic lights alternate the right of way accorded to users by displaying lights of a standard color (red, amber (yellow), and green) following a universal color code. In the typical sequence of color phases :The green light allows traffic to proceed in the direction denoted, if it is safe to do so and there is room on the other side of the intersection .The amber (yellow) light warns that the signal is about to change to red. In a number of countries – among them the United Kingdom – a phase during which red and yellow are displayed together indicates that the signal is about to change to green.[3] Actions required by drivers on a yellow light vary, with some jurisdictions requiring drivers to stop if it is safe to do so, and others allowing drivers to go through the intersection if safe to do so. A flashing amber indication is a warning signal. In the United Kingdom, a flashing amber light is used only at pelican crossings, in place of the combined red–amber signal, and indicates that drivers may pass if no pedestrians are on the crossing. Globally, RSA is 10th & in SEAR, 7thleading cause of death in all age groups 1. According to WHO estimates, RSA is the 9 th leading cause of death as per on the basis of Daly. However, this is likely to reach at no. 3 by 2020. It was estimated that over 75% of RSA occur in the so called developing countries, even though these countries account for only 32% of total motor vehicle fleet, which involves 65% of pedestrians and 35% of school children. Child pedestrian injury, an important cause of morbidity and mortality remains one of the leading causes of death in developed and developing countries. Each year in US approximately 850 children under the age of 15 years are killed & another 30,000 are injured in pedestrian collisions. During last decades injuries due to RSA have risen by 300% in Asian and African countries in contrast to 30-40% in developed countries. There is limited literature available regarding accident related behaviour in developing countries. The chances of RSA can be averted to a large extent, if school children who are going to be adults of tomorrow are made aware of road safety measures. Hence present study was focused on school children to study knowledge of various risk factors pertaining to road side accidents and their practices.

RESEARCH METHODOLOGY

The research methodology refers to the principles and ideas on which researchers bases their procedures and strategies. Methodology is the most important part of any research study which enables the researcher to form the blueprint for the study undertaken.

Research Approach

The comparative study approach was used to evaluate the knowledge regarding the road traffic signals among the male and female middle adolescents in selected junior college of urban areas.

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Research Design

Descriptive comparative design was used (non experimental research design) Pre - test assessment the knowledge on road traffic signals among the middle adolescents. Planned teaching on road traffic signals was given through booklet of road traffic signs.

Variables

In the present study the dependent variable is knowledge regarding the road traffic signals among the middle adolescents in selected junior colleges of urban areas. In the present study the independent variable is demographic data, structured knowledge questionnaires, and pictorial questionnaires on knowledge regarding the road traffic signals.

Setting of the Study:

The study was conducted in selected junior colleges of urban areas. The selected urban areas are approximately 20 kms away from the college of nursing.

Population:

Target population: In this study, the target population is the junior colleges in urban areas between the middle adolescents. Accessible population: In this study, the accessible population are between the middle adolescents in selected urban areas.

Sample and sampling technique:

The sample for the present study was comprised of 100 sample (50 Male ,50 Female) middle adolescents in selected junior colleges of urban areas. The sample for the study were selected through simple random sampling technique.

Data collection tools and techniques:

A Self structured knowledge questionnaire was selected on the basis of objectives of the study, as it was considered to be the most appropriate instrument to elicit responses from the subjects because the tool is the vital aspect for all kinds of studies. The tool was classified into two sections. Prior to data collection permission was obtained to conduct the study from the Authorities of the selected Urban areas. Investigator utilized the simple random sampling techniques to select the 100 subjects. Investigator personally visited each subjects, introduced himself to the subjects and explained the purpose of the study and ascertained the willingness of the participants, the subjects were assured anonymity and confidentiality of the information provided by them. Written consent was obtained from the subjects under the study. Period for data collection: - The period of data collection was from 8.12.2018 to 21.12.2018. Pre-test Pre-test conducted among the male and female middle adolescents before the administration with questionnaires. Plan for data analysis:-The collected were organised, tabulated and analyzed by using descriptive statistics i.e frequency, and percentage mean, median, standard deviation and inferential statistics i.e t-test, Chi-square test.

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MAJOR FINDINGS

SECTION-I

In the male adolescents according to educational qualification, 8% were in the 10th, 88% in the 11th and 4% were in the 12th, In the female adolescents according to educational qualification, 10% were in the 10th, 88% in the 11th and 2% were in the 12th . In the male adolescents according to father education, 12% were illiterate, 44% were up to primary, 36% were secondary and 8% were up to higher secondary. In the female adolescents according to father education, 12% were illiterate, 44% were up to primary, 38% were secondary and 6% were up to higher secondary. In the male adolescents according to mother education, 28% were illiterate, 48% were up to primary, 22% were secondary and 2% were up to higher secondary. In the female adolescents according to mother education, 20% were illiterate, 42% were up to primary, 32% were secondary and 6% were up to higher secondary. In the male adolescents according to Numbers of year handling vehicles, 8% answered one year, 20% since two years, 26% since three years and 46% more than three years. In the female adolescents according to Numbers of year handling vehicles, 4% answered one year, 18% since two years, 34% since three years and 44% more than three years. In the male adolescents according to Types of vehicles handling, 36% answered gear motor cycles, 12% without gear, 12% Electrical and 40% other types. In the female adolescents according to Types of vehicles handling, 18% answered gear motor cycles, 16% without gear, 16% Electrical and 50% other types. In the male adolescents according to History of road accidents, 36% answered yes and 64% no in the family or self within last two year. In the female adolescents according to History of road accidents, 36% answered yes and 64% no in the family or self within last two year. In the male adolescents according to History of road accidents yes then where, 30.50% as Pedestrians, 11.11 as Cyclist, 5.56% as Riding motor cycles with gear and 2.78% with riding motor cycles without gear. In the female adolescents according to History of road accidents yes then where, 33.33% as Pedestrians, 66.67 as Cyclist. In the male adolescents according to pervious knowledge regarding road traffic signals, 66% answered yes and 34% no. In the female adolescents according to pervious knowledge regarding road traffic signals, 74% answered yes and 26% no. In the male adolescents according to sources of information regarding road traffic signals, 6.06% from newspapers, 39.39% from the television, 48.48% from the family and 6.06% from the friends. In the female adolescents according to sources of information regarding road traffic signals, no one from newspapers, 18.92% from the television, 72.97% from the family and 8.11% from the friends.

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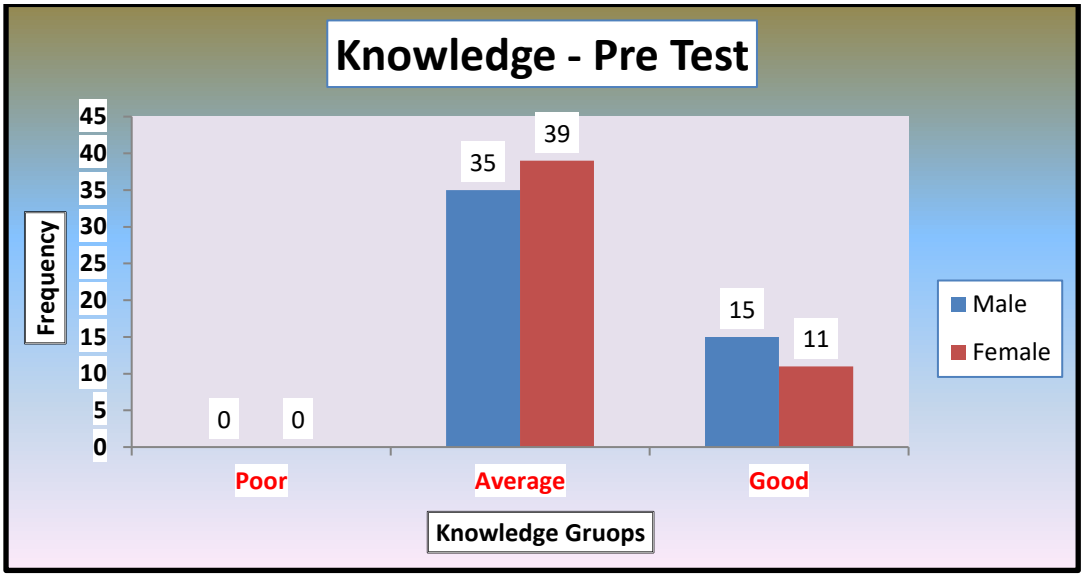
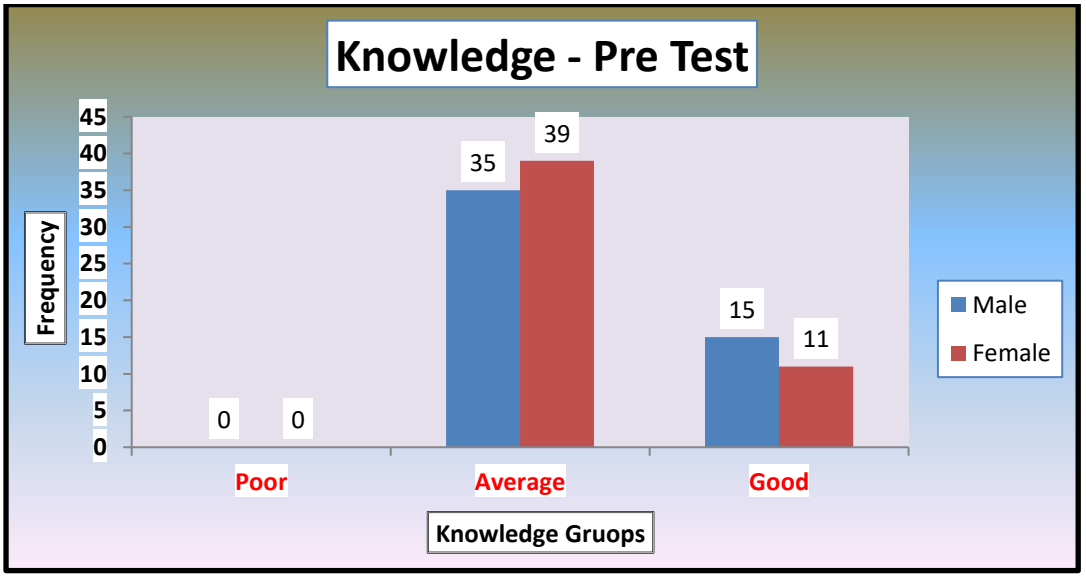
SECTION-II

In pre test knowledge scores, in the males 30% of subjects were having good knowledge, 70% were having average knowledge and no one in the poor knowledge category. In the females 22% of subjects were having good knowledge, 78% were having average knowledge and no one in the poor knowledge category. In females 94% of subjects were having good knowledge, 6% were having average knowledge and no one in the poor knowledge category.



General assessments of pre test knowledge as per pictorial questioner



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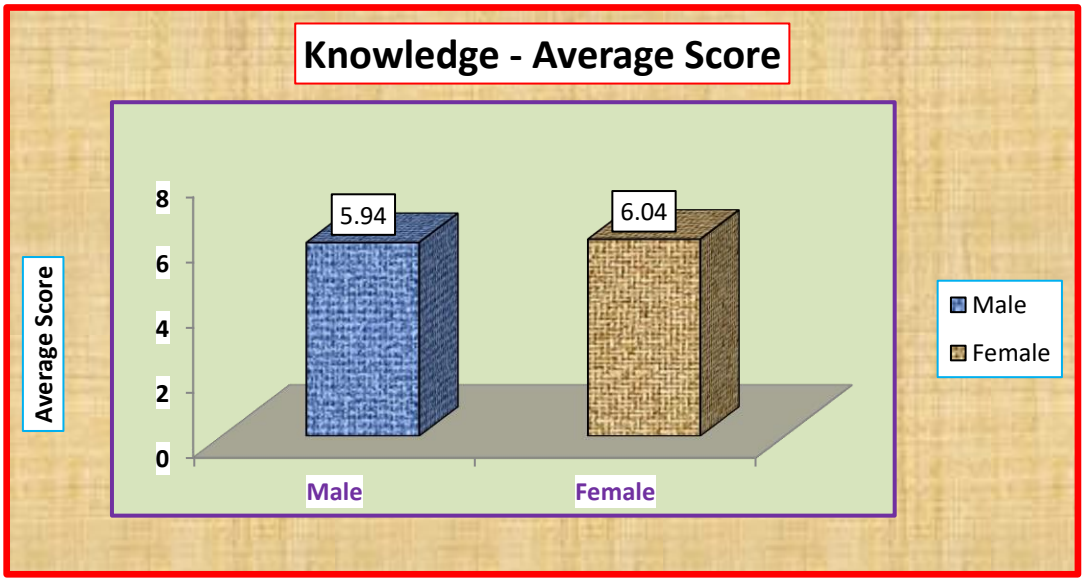
SECTION III

Comparison of pre test knowledge score regarding road traffic signals among male and female

The comparisons of the pre test means of the knowledge of males were done by the paired t test. The pre test average score was 5.94 with standard deviation of 0.95. The comparisons of the pre test means of the knowledge of females were done by the paired t test. The pre test average score was 6.04 with standard deviation of 0.72. The comparisons of the pre test means of the knowledge as per pictorial questionary of males and females were done by the unpaired t test. The pre test average score for males was 18.46 with standard deviation of 1.91. The pre test average score of females was 18.54 with standard deviation of 1.62. The test statistics value of the unpaired t test was 0.22 with p value 0.820.



SECTION IV

Association of knowledge score in relation to demographic variables

For the all demographic variables the p value of the association test with knowledge was more than 0.05. That means, the knowledge of adolescent regarding the road traffic signals is independent of these demographic variables. Concludes that, there was no significant association of demographic variables with the knowledge.

DISCUSSIONS & CONCLUSIONS

The findings of the study have been discussed with reference to the objectives and hypothesis As per findings of the study it provide the description related to demographic variables which shows majority of the male and female middle adolescents and with secondary education. As well as Majority of middle adolescents having the good knowledge regarding the road traffic signals and source of

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information is television

In pre test knowledge scores as well as pictorial knowledge score, majority of the male middle adolescent were having average knowledge and the majority of females middle adolescent were also having average knowledge regarding road traffic signals.

In this study the investigator also assess the knowledge score of male and female middle adolescents regarding the road traffic signals. So, a finding shows that Female middle adolescents pursue the good knowledge regarding the road traffic signals than the male middle adolescent.

The present study also shows the significant correlation between the knowledge score of male and female middle adolescents as correlation coefficient is 0.05

CONCLUSION

The comparisons of the pre test means of the knowledge of males were done by the paired t test. The pre test average score was 5.94 with standard deviation of 0.95. The post test average score was 7.36 with standard deviation of 0.56. The test statistics value of the paired t test was 10.57 with p value 0.00. The comparisons of the pre test and post test means of the knowledge of females were done by the paired t test. The pre test average score was 6.04 with standard deviation of 0.72. The post test average score was 7.40 with standard deviation of 0.6. The test statistics value of the paired t test was 11.99 with p value 0.00. The comparisons of the post test means of the knowledge of males and females were done by the unpaired t test. The post test average score for males was 7.36 with standard deviation of 0.56. The post test average score of females was 7.40 with standard deviation of 0.6. The test statistics value of the unpaired t test was 0.34 with p value 0.73. The findings of this study have implications for nursing administration, nursing education, nursing research and nursing practice. Nurses working in the community and clinical settings can benefit from such researchers, as it will provide more insight regarding the road traffic signals among the middle adolescents. They should know the importance of proper knowledge regarding the road traffic signals. Nurses can provide health education and counseling to promote awareness about road traffic signals. Nurses can also use this opportunity for the better understanding and cooperation Nurses and other health care workers have begin to provide intensive and long-term services or assess the knowledge regarding the road traffic signals among the middle adolescents.

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