

Awareness and Practice on Road Safety among Adults in Selected Area of Jalandhar Cantt, Punjab

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Abstract:- It has been estimated that one million death and 15 million road side accident occur on the road worldwide. Globally road side accidents are the 7th leading cause of death in all age groups. In India we have 1% of the world vehicle population, but 6% of the world accidents ¹. The aim of the study is to assess the awareness and practice on road safety among adults in in selected area of Jalandhar Cantt, Punjab. A total of 108 samples were selected for the study and samples were the adults with in the age group of 18-60 years. The major findings of the study were as follows:

The study analysis showed that majority (69%) of the samples were males and 60% belonged to the group of 18-30 years of age. 15% of samples were drivers by profession, 63.8% had a valid driving license. Majority of samples, (83.2%) had good awareness on road safety and 94% of samples had good practice on pedestrian road safety. The study showed that there was a low positive and significant correlation between awareness and practice among pedestrians (n=400) as the p value is .001 and spearman's rho value is 0.269. And there was a low and significant correlation between awareness and practice of drivers the p value is .001 and spearman's rho value for 0.322.

I. INTRODUCTION

From the beginning of human era, journey was inevitable part of life. Man wandered in search of food and shelter and to satisfy his primary needs. Wandering became journey, thus man molded new means of life. Human life changed by means of trade and commerce. The invention of motor vehicles and machinery revolutionized the industry. The role of vehicle expanded from trade to transport. The rapid development of industry leads to tremendous increase in the number of vehicles. When the man realized the life has to be fast to accomplish his motives, he tried to travel a long distance. And he tried to make it shorter by increasing the speed of travel. This is seen in form of innovation and production of new vehicles with speed and power. Even though these helped the man, at the same time it has a negative side too. It resulted in large number of vehicle population with increased velocity, leading to a large number of accidents. To reduce these mishappenings man has brought in laws and regulations. Our negligence, unawareness of such rules and regulations made

the graph of accidents to reach its heights. Where we need change is in our practice which can be achieved through proper knowledge. The public awareness on traffic rules favorable attitude to practice and first aid management will enable them to save the life of fellow beings¹.

➤ Objectives of the Study

- Assess the awareness on road safety among adults and to find the association between awareness, practice and selected demographic variables.
- Determine relationship between awareness and practice on road safety among pedestrians and drivers.

➤ Hypotheses

The hypotheses were tested at 0.05 level of significance.

H₁: There will be significant association between awareness and age, gender, occupation, education, secured driving license, owner ship of a vehicle, caught by police

H₂: There will be significant association between practice of pedestrians and age, gender, occupation, education, presence of driving license, owner ship of a vehicle

H₃: There will be significant association between practice of drivers and age, gender, occupation, education, owner ship of a vehicle

H₄: There will be significant relationship between awareness and practice of pedestrians on road safety

H₅ : There will be significant relationship between awareness and practice of drivers on road safety.

➤ Conceptual framework

The conceptual frame work used in the study is modified Pender's health promotion model. The health promotion model (HPM) proposed by Nola J Pender (1982; revised, 1996) was designed to be a "complementary counterpart to models of health protection." It defines health as a positive dynamic state not merely the absence of disease. It describes the multi-dimensional nature of persons as they interact within their environment to pursue health.¹⁰

II. METHODOLOGY

➤ Research Approach

In order to accomplish the objectives of the study, a survey approach was used

➤ Research Design

Descriptive correlative survey design was used to assess the awareness and practice on road safety.

➤ Research Setting

The main study was undertaken at Jalandhar Cantt. Sadar Bazar area was selected by simple random sampling.

➤ Population

The population consisted of adults between the age group of 18-60 years.

➤ Sample

Adults between the age group of 18-60 years were selected.

➤ Sample Size and Sample Technique

The total samples included in the study were 108, based on relative precision of 10% of the pilot study analysis. Simple random sampling technique was chosen for selection of areas and the samples were selected using convenient sampling technique.

➤ Sampling Criteria

- Willing to participate in study during the time of data collection period
- Who are residing in Sadar Bazaar
- Who are able to read, understand and write Hindi and English.
- Adults between the age group of 18 -60 years

➤ Data Collection Techniques

The following data collection tools were used in the study:

- Tool No 1: Demographic Proforma
- Tool No 2: structured awareness questionnaire on road safety
- Tool No 3: structured self-reported practice scale

➤ Description of data collection instrument

- **TOOL 1: Demographic Proforma: It is Divided into two Sections:**

Section A: It consisted a total of nine items namely age, gender, level of education, occupation, marital status, religion, type of family; **Section B:** It consist on items namely no of presence of driving license and type of license possessed, the years completed after having the driving license, type of vehicle, past history of traffic rule violation in which sample

have been caught by a traffic police, the reason for that and the number of ties sample has been caught by police

- **TOOL 2: Structured Awareness Questionnaire on Road Safety**

The questionnaire comprised of 26 item related to road safety. There were four responses for each question. The correct response was assigned a score of one and the incorrect response was assigned a score of zero. The items were developed by reviewing the literature and were classified mainly into two categories; poor (1-13), and good (14-26)

- **TOOL 3: Structured Self Reported Practice Tool**

The practice scale consisted of 31 items. There were five responses to each item, ranging from always, very often, sometimes, rarely, never. The items were subdivided into following categories. Section A: Consisted of 14 items related to pedestrian’s road safety. The practice score was arbitrarily classified into poor (0-28) and good (29-56). Section B: Consisted of 14 items related to road safety practice of adults who drive. The practice score was arbitrarily classified into poor (0-28) and good (29-56). Section C: consisted of 1item related to practice of adults who drive four-wheeler vehicles, Section D: consisted of 2 items related road safety practice of adults who rides two-wheeler.

III. RESULTS

The study analysis shows that majority (72.2%) of the samples were males and 44.44% belonged to the group of 18-30 years of age. 13.88% of samples were drivers by profession, 76.85% had a valid driving license.

➤ Description of Awareness on Road Safety

The awareness on road safety was assessed using a structured questionnaire consisted of 26 items. The maximum possible score was 26 and the scores were categorized based on arbitrary method.

Table 1: Median, Inter Quartile Range, Minimum and Maximum Range of Awareness Score (n=108)

Awareness score:	Median	IQR		Minimum	Maximum
		Q ₁	Q ₃		
	19.0	15	21	06	25

The data presented in table 1 shows that the median score is 19.0 with inter quartile range of Q₁ (15) and Q₃ (21). Minimum score obtained by the sample is 06 and maximum score was 25.

Table: 2 Frequency and Percentage Distribution of Awareness Score (n=108)

Awareness score	Frequency (f)	Percentage (%)
Poor (0-13)	18	16.66
Good (13-26)	90	83.34

The data presented in the table 2 shows that out of 108 samples, 16.66% had poor awareness and 83.34% had good awareness on road safety

Section 3:- Description of Practice on Road Safety

The practice on road safety were assessed by using a self-reported scale consisted of 31 items under four sections. Section A for pedestrians consisted of 14 items. Section B for all drivers consisted of 14 items, Section C for four-wheeler drivers consisted of 1 items and section D for two wheelers consisted of 2 items. The data related to practice on road safety is presented in the following tables and graphs.

Table 3: Median, Inter Quartile Range, Minimum and Maximum range of practice score of pedestrians (n=108)

Practice score:	Median	IQR		Minimum	Maximum
		Q ₁	Q ₃		
	42.0	36	47	14	56

The data presented in table 3 shows that the median score is 42.0 with inter quartile range of Q₁ (36) and Q₃ (47). Minimum score obtained by the sample was 14 and maximum score was 56.

Table 4: Frequency and Percentage Distribution of Practice Score of Pedestrians (n=108)

Practice score	Frequency (f)	Percentage (%)
Poor (0-28)	06	5.55
Good (29-56)	102	94.45

The data presented in the table 4 shows that out of 108 samples **94.45** had good practice and **5.55** had poor practice.

Out of 110 four-wheeler drivers 25.9% didn't have the practice of wearing safety belt while driving. The study shows that there is significant association between awareness (n=108) and marital status ($\chi^2_{(3)}=4.797, p=0.02$), practice of pedestrian(n=108) on road safety and occupation ($\chi^2_{(3)}=7.332, p= 0.006$). The study shows that there is a low positive and significant correlation between awareness and practice (n=108) as the p value is .001 and spearman's rho value is 0.269.

IV. LIMITATIONS

As the study used convenient sampling the study findings is limited to the samples selected for the study and practice scale is self-reported one so the authenticity of the data forms a limitation for the study.

V. IMPLICATIONS

This study has implications to nursing practice research, education and administration. Further studies on a larger sample and an observational scale can be used to assess the practice to overcome the limitations of the study.

VI. CONCLUSION

The study shows that majority of samples are aware of the road safety measures and this awareness is independent of their demographic variables expect that of the educational status, which have a significant relation to the awareness level on road safety measures. The practices related to road safety are not found to be associated with demographic variables for pedestrians on road safety. While the practice of drivers on road safety is associated with religion, statistically even though there is no logical significance. The awareness and practice of pedestrians had a low positive and significant correlation while this relation is having a low and significant correlation in terms of drivers

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