

KNOWLEDGE, ATTITUDE AND APPROACH OF FIRST AID PROCEDURES AMONGST UNDERGRADUATE STUDENTS OF GUJARAT: AN EPIDEMIOLOGICAL STUDY

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ABSTRACT:

Aim and Objective: The basic purpose of the study is to analyze the knowledge, attitude and approach of undergraduate students regarding the awareness of first aid procedures in Gujarat.

Materials and Methods: A cross-sectional study was implemented in 2014 amongst 400 undergraduate students in Gujarat. The categories were divided into male-female sex group and into those with formal training for first aid and those without formal training for first aid. The organized data was assembled by the use of a questionnaire. The questionnaire which was presented had a set of 20 relevant questions.

Results: The cross-sectional study very clearly revealed that the knowledge, attitude and approach among the female sex group regarding the first aid procedures was way superior as contrasted with the male sex group. Moreover, the findings were much better in students who had received formal training in first aid as compared to those students who had not received it.

Conclusion: The cross sectional study was strived to understand the knowledge, attitude and approach amongst undergraduate students of Gujarat regarding the first aid measure. A new horizon of improvement is feasible in male students without any formal training of first aid. The need for mandatory training of first aid measures is highly recommended for all the undergraduate students and should be added as a part of educational curriculum to provide an improved understanding and training of the first aid measures.

Key words: First Aid; Awareness; Emergency Measures

INTRODUCTION:

First Aid has been defined as the assistance given to any living being suffering from a sudden illness/injury with optimum care contributed to conserve life and avert the condition from aggravating [1]. The concept of first aid has been a part of human society since the very beginning of civilization. With better available resources over a period of time, a standard protocol was

introduced. Mr. Peter Shepherd and Francis Duncan, two officers in the British army, were the first to expatiate the notion to civilians by introducing the very first curriculum in first aid [2]. The Medical and Para-Medical students are taught to handle the emergency situations as a part of their educational curriculum. However the rest of the population have limited information

about the emergency situation and hence the concept of First Aid Training for civilians was introduced.

In the current era, accidental road injuries have caused 1.4 million deaths in 2013 rising from 1.1 million deaths in 1990 [3]. If timely and correct first aid treatment is made available to the injured, the measures could be lifesaving. Hence it is important that along with the medical team, the civilians should also be well trained in the first aid protocol. More often the on-site foremost action taken in case of an emergency illness, decides the further course and prognosis of the disease. [4,5]

MATERIALS AND METHODS:

1. Under-Graduates Females with formal training in First Aid
2. Under-Graduates Females without formal training in First Aid
3. Under-Graduates Males with formal training in First Aid
4. Under-Graduates Males without formal training in First Aid
5. Data accumulation with the personalized Questionnaire collection

The basic structure of the questionnaire was established on the relevance of knowledge of the first aid measures.

METHOD:

A cross-sectional study was diligently performed among 400 under-graduate students in Gujarat. The data was

collected by the means of questionnaire that was handed over to them. The questionnaire consisted of 20 questions that were relevant to First Aid. The group was divided based on the sex of the person and whether the person had received a formal training or not.

QUESTIONNAIRE:

- Q.1. What is first aid?
- Q.2. What is the basic purpose of first aid?
- Q.3. What is the foremost step in managing an emergency situation by first aid team?
- Q.4. What are the basic points to be considered when designing a First Aid Room?
- Q.5. What are the ABC's of First Aid?
- Q.6. CPR in a Child of 1 to 8 years age – number of compressions?
- Q.7. CPR in an Adult- number of compressions?
- Q.8. How far do you compress the chest of a child during CPR?
- Q.9. How far do you compress the chest of an adult during CPR?
- Q.10. What is the most important part to be managed in an unconscious person?
- Q.11. How can the breathing of an unconscious person be checked?
- Q.12. How can the pulse of an unconscious person be checked?

Q.13. How can one assist in the clotting process in a case of external bleeding?

Q.20. What is the first aid treatment of a case of choking?

Q.14. What is the first aid treatment for a sprain?

The study group has been divided into 2 groups:

Q.15. What is the first aid treatment for a vehicular accident?

A) Sex

B) Training

Q.16. What is the first aid treatment of a seizure?

A) Sex – 1) Females

2) Males

Q.17. What is the first aid treatment of hypovolemic shock?

B) First Aid Training – 1) With Training

2) Without Training

Q.18. What is the first aid treatment of severe chest pain?

Q.19. What is the first aid treatment of a diabetic patient who is drowsy?

RESULTS:

Table 1 – Data & analysis – 100 under-graduates females with formal training in first aid

Q.NUMBER	ACCEPTABLE ANSWER (%)	UNACCEPTABLE ANSWER (%)	TOTAL PARTICIPANTS (100)
1	83	17	100
2	89	11	100
3	91	09	100
4	64	36	100
5	99	01	100
6	85	15	100
7	91	09	100
8	68	32	100
9	73	27	100
10	61	39	100
11	91	09	100
12	97	03	100
13	81	19	100
14	59	41	100
15	100	00	100
16	87	13	100
17	81	19	100
18	62	38	100
19	98	02	100
20	79	21	100

AVERAGE APPROPRIATE ANSWERS = 81.95%

Table 2 –Data & analysis–100 under-graduates female without formal training in first aid

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Q.NUMBER	ACCEPTABLE ANSWER (%)	UNACCEPTABLE ANSWER (%)	TOTAL PARTICIPANTS (100)
1	71	29	100
2	83	17	100
3	61	39	100
4	21	79	100
5	23	77	100
6	00	100	100
7	10	90	100
8	00	100	100
9	09	91	100
10	41	59	100
11	75	25	100
12	63	37	100
13	71	29	100
14	42	58	100
15	89	11	100
16	26	74	100
17	21	79	100
18	31	69	100
19	91	09	100
20	61	39	100
AVERAGE APPROPRIATE ANSWERS = 44.45%			

Table 3 –Data & analysis–100 under-graduates males with formal training in first aid

Q.NUMBER	ACCEPTABLE ANSWER (%)	UNACCEPTABLE ANSWER (%)	TOTAL PARTICIPANTS (100)
1	81	19	100
2	83	17	100
3	89	11	100
4	57	43	100
5	100	00	100
6	89	11	100
7	87	13	100
8	71	29	100
9	69	31	100
10	71	29	100
11	87	13	100
12	97	03	100
13	79	21	100
14	70	30	100
15	100	00	100
16	74	26	100
17	80	20	100
18	59	41	100
19	96	04	100
20	75	25	100
AVERAGE APPROPRIATE ANSWERS = 80.70%			

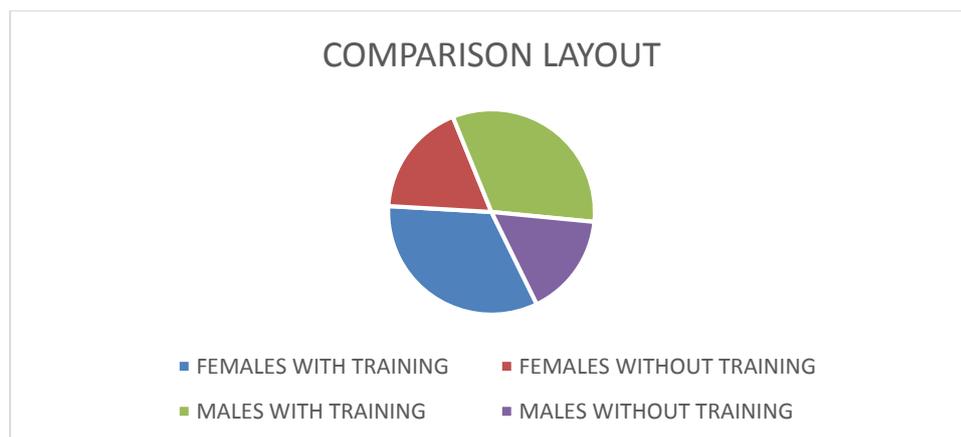
Table 4 –Data & analysis–100 under-graduates males without formal training in first aid

Q.NUMBER	ACCEPTABLE ANSWER (%)	UNACCEPTABLE ANSWER (%)	TOTAL PARTICIPANTS (100)
1	73	27	100
2	59	41	100
3	62	38	100
4	09	91	100
5	21	79	100
6	03	97	100
7	09	91	100
8	00	100	100
9	43	57	100
10	61	39	100
11	30	70	100
12	71	29	100
13	50	50	100
14	31	69	100
15	85	15	100
16	03	97	100
17	25	75	100
18	31	69	100
19	86	14	100
20	51	49	100

AVERAGE APPROPRIATE ANSWERS = 40.15%

TABLE 5 – COMPARISON AMONG THE MALE AND FEMALE SEX GROUP WITH RESPECT TO WITH/WITHOUT FORMAL TRAINING

TYPE	APPROPRIATE (%)	INAPPROPRIATE (%)
FEMALES- WITH TRAINING	81.95	18.05
FEMALES- WITHOUT TRAINING	44.45	55.55
MALES- WITH TRAINING	80.70	19.30
MALES- WITHOUT TRAINING	40.15	59.85



A.PIE CHART

CONCLUSION:

The analysis make it very evident that knowledge and understanding of the first aid measures is way better in females with formal training of first aid measures as compared to any other group. The females without training are way below par on results as compared to the females who have received formal training. In case of males sex group too, the males without training are way below par on results as compared to the males who have received formal training. Overall, the females are better than males and the ones with formal training are better than without formal training. The study suggests that a huge majority of undergraduate students do

not have a formal training in first aid measures which restricts their knowledge on the subject. Hence a definitive addition of formal training in first aid measures in the curriculum must be considered. In addition, centers for training should be developed in the state to provide optimum conditions for the training.

The basic purpose of the study was to evaluate the difference between the students who had received a formal training in First Aid and those who hadn't. With increased incidences of accidents and emergency life threatening situations, it is imperative that everybody receives a basic training in the First Aid Measures.

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