



Original Research Article

## Perception and Practices Regarding First-Aid among Nursing Students in Mandya

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### ABSTRACT

**Background:** Nursing students are trained to assist in emergencies in hospital settings. But the knowledge may not be adequate for handling the emergency outside the hospital at the site of emergency or accident.

**Objectives:** To assess the perception and practices regarding first aid among the nursing students.

**Methodology:** This cross sectional study was conducted in August 2014 in a nursing college in Mandya. 112 nursing students participated in this study. The details of perception and practices regarding first aid were obtained by using self administered, pre-tested questionnaire.

**Results:** The study participants were aged between 17 to 23 years. 107(95.54%) students had heard about first aid practices and 22(19.64%) students had undergone training on first aid practices. Wound was perceived to be the commonest condition requiring first aid. Among the 112 students, 76 (67.86%) replied that first aid should be given for wounds and 8 (7.14%) of them perceived that fainting also needs first aid.

**Conclusion:** Overall perception and practices regarding first aid was found to be inadequate. There is a need for training the nursing students in first aid practices.

**Key words:** First aid, nursing students, perception, practices

### INTRODUCTION

Injuries account for 9% of global mortality and are a threat to health in every country of the world. <sup>[1]</sup> Many times death results because of delay in obtaining appropriate medical care. A large proportion of people surviving injuries incur temporary or permanent disabilities. Often the first action taken for management of injuries and common illness decides the future course of disease and complication

rates. <sup>[2]</sup>

First aid is applied to injured or ill persons in any health threatening setting in order to save life, prevent degradation of the situation, or contribute to a treatment process before professional medical care is available. First aid refers to assessments and interventions that can be performed by a bystander (or by the victim) with minimal or no medical equipment. <sup>[3]</sup>

Everyone has the potential to save lives. First aid education and practice are essential tools for saving the lives in emergencies. [4] Person giving first aid is the first contact person as care giver and must exercise the concept of what to do and what not to do. First aid knowledge and skills can mean the difference between life and death, between temporary and permanent disability and between rapid recovery and long hospitalization. [5]

Students in nursing colleges are taught how to handle emergencies in hospital setting where drugs and other necessities are available. But the adequate knowledge required for handling an emergency at the site of the injury or illness may not be sufficient. Various myths and incorrect practices in managing the emergencies exist. [6-8] In this background the present study was undertaken with the objective to assess the perception and practices regarding first aid among nursing students.

## MATERIALS AND METHODS

This cross-sectional study was conducted during August 2014 in Adichunchangiri Institute of Nursing Sciences, Mandya, South India. A total of 120 students were pursuing nursing course and 112 students participated in this study. The students were briefed about the objective of the study and their informed consent was taken for participation. After obtaining permission from head of the institution, data was collected by using self administered, pre-tested structured questionnaire.

The questionnaire included questions on perceptions and practices regarding first aid. Questionnaire was collected back on the same day. The data was entered using Microsoft Excel 07 version and analyzed using SPSS - 16. Results were expressed in terms of frequency and percentages.

## RESULTS

A total of 112 B.Sc. nursing students participated in the present study of which 27 were in 1st year, 32 in 2nd year, 26 in third year and 27 in 4th year respectively. The students were aged between 17- 23 years and the mean age was 20±1 years. 107 (95.54%) students had heard about first aid practices and 22 (19.64%) students had undergone training on first aid practices in the past.

### *Perception regarding first aid*

Among the 112 students, 76 (67.86%) replied that first aid should be given for wounds and 8 (7.14%) of them perceived that fainting also needs first aid [Table1]. In case of wounds 72 (64.29%) said that wound has to be washed and 18 (16.07%) replied that antiseptics should be applied. In case of fracture, 59 (52.68%) said that movement of fracture part should be avoided and 24 (21.49%) perceived that the fracture part should be supported by splinting. In case of epilepsy, 58 (51.79%) perceived that a metal rod or key should be given. In case of burns, 48 (42.86%) replied that burnt area should be placed in cold water and 18 (16.07%) mentioned that antiseptic ointment should be applied. In case of bleeding from nose, only 17 (15.18%) perceived that pressure should be applied over the nose. In case of fainting, 30 (26.79%) mentioned that injuries should be checked and 28 (25%) replied that water should be given to drink even when the person is unconscious [Table 2].

**Table 1: Perception and practice of first aid**

Case	Perception*	Practice*
Wound	76(67.86)	66(58.93)
Burns	40(35.71)	22(19.64)
Epilepsy/ Fits	23(20.54)	15(13.39)
Fracture	21(18.75)	16(14.29)
Bleeding from nose	18(16.07)	8(7.14)
Fainting	8(7.14)	5(4.46)
All	4(3.57)	2(1.79)

Figures in parenthesis indicate percentages

\* Multiple options were marked

**Table 2: Perception of first aid**

Items	Number*	Percentage
<b>What should be done in case of wounds</b>		
Wash the wound	72	64.29
Apply antiseptics	18	16.07
Press for 10 min	17	15.18
Dress the wound	30	26.79
Others( Apply herbs, mud)	5	4.46
<b>What should be done in case of epilepsy/ fits</b>		
Put person in safe place	23	20.56
Give metal rod/ key	58	51.79
Put piece of cloth between tongue and teeth	28	25
Others(give water, calm the person)	16	14.29
<b>What should be done in case of burns</b>		
Place burnt area in cold water	48	42.86
Cover burnt area with clean cloth	42	37.5
Apply antiseptic ointment	18	16.07
Others (apply turmeric powder/ cowdung, water to drink)	13	11.61

\* Multiple options were marked

**Table 3: Practice of first aid**

Items	Number*	Percentage
<b>What was done in case of wounds</b>		
Wash the wound	66	58.93
Apply antiseptics	24	21.49
Press for 10 min	9	8.04
Dress the wound	27	24.11
Others (Apply herbs, mud)	5	4.46
<b>What was done in case of epilepsy/ fits</b>		
Put person in safe place	20	17.86
Give metal rod/ key	63	56.25
Put piece of cloth between tongue and teeth	22	19.64
Others (give water, calm the person)	10	8.93
<b>What was done in case of burns</b>		
Place burnt area in cold water	45	40.18
Cover burnt area with clean cloth	31	27.68
Apply antiseptic ointment	19	16.96
Others( apply turmeric powder/ cowdung, water to drink)	16	14.29

\* Multiple options were marked

### ***Practice of first aid***

Among the 112 nursing students, 66 (58.93%) had given first aid for wounds, 22 (19.64%) for burns and 15 (13.39%) for epilepsy. Only 2 (1.79%) students had given first aid for all the mentioned options. In case of wound, 66 (58.93%) had washed the wound area and 27 (24.11%) had dressed the wound. In case of fracture, 66 (58.93%) had avoided movement of fracture part whereas 15 (13.39%) had splinted the fracture part. During fits the most common practice was to give a metal rod or key to the person. In case of burns, the commonest practice was

to place the burnt area in cold water. Turmeric powder was applied by 7 (6.25%) and 1 (0.89%) had applied cowdung for burns. In case of bleeding from nose, 48 (42.86%) had kept the victim in lying / forward bending position. Only 20 (17.86%) had applied pressure over the nose. For fainting, most of them 28 (25%) had given water to drink when unconscious followed by 27 (24.11%) checking for injuries [Table3].

## **DISCUSSION**

Nursing students are trained to assist in emergency conditions in a hospital where essential drugs and equipments are available. However, at the site of emergency the knowledge required to manage without the required setup may not be sufficient. With the increase in emergency conditions it has become essential to train medical personnel in first aid practices. [9,10] In this study an attempt was made to know the perception of first aid among nursing students and what they actually practiced in case of an emergency.

In the present study, 95.54% of the nursing students had ever heard of first aid and 19.64% had undergone prior training in first aid practices. This was a very good response but when the knowledge and practices of first aid were further assessed it was found to be inadequate. Similar findings were observed in a study conducted on medical students in Mangalore.3 A study conducted among resident doctors and consultants in Lucknow showed that there was less than adequate knowledge (52%) and practices (54%). [11] This implies that not only a formal training in first aid is required, but periodic reinforcement is very essential.

Most common event requiring first aid was wounds followed by burns. Knowledge regarding management of fractures was good in 44% students in a

study done in Karachi in 2010 and 87% in a Peruvian study. <sup>[2,12]</sup> In the present study, only 21.42% had good knowledge. First aid management of burns was known correctly by 16.07% when compared to 23.2% in an Irish study. <sup>[13]</sup>

## CONCLUSIONS

Overall perception and practices regarding first aid was inadequate among the nursing students. The key areas in which knowledge was lacking were identified. The study has thus brought out the need for providing formal training on first aid practices and emphasizes the need for periodic reinforcement.

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