“A STUDY TO ASSESS THE KNOWLEDGE REGARDING BLOOD DONATION AMONG UNDERGRADUATE STUDENTS OF ENGINEERING COLLEGE OF AHMEDABAD”

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ABSTRACT

A quasi experimental non randomized pretest posttest design was used to “Assess the Knowledge regarding blood donation among undergraduate students of engineering students” 100 sample of engineering students selected by nonprobability convenient sampling technique. The structure knowledge questionnaire were used to assess the level of knowledge on blood donation. Validity was assessed by 4 experts. Leaflet is given on the day of pretest. Posttest was conducted on after 7 days of pretest by using same tool. The data will analyzed by descriptive statistics such as Mean, SD, frequency and percentage. The mean posttest level of knowledge regarding blood donation was significant higher than the mean pretest of knowledge regarding blood donation. The calculated T test value was (14.25) higher than the tabulated value so H1 is accepted. It was suggested that there was significant association between pretest knowledge score and posttest knowledge score on blood donation.

KEY WORDS

Knowledge, Blood donation, under graduate students, Engineering College.
INTRODUCTION

Blood can save millions of lives and young people are the hope and future of safe blood supply in the world. The theme of World Health Day in 2000 was “Blood saves life, Safe blood starts with me.” Blood donation is remarkably, safe medical procedure. “More blood, more life”, this is the theme for World Blood Donor Day 2011 (World Health Organization 2012).

Blood Donation also called blood banking, refers to the process of collecting, testing, preparing and storing whole blood and blood components intended primarily for transfusion. Blood registry refers to collection and sharing of data about donated blood and donors. (Encyclopedia.com)

Blood transfusion help in improving and saving life of patient, but many patients requiring transfusion do not have timely access to safe blood. Voluntary blood donation is considered as backbone of blood safety and safe transfusion practices. There is a serious need to improve the recruitment and retention of voluntary donor population to ensure a sustainable and safe blood transfusion practice (Dr. Ashish Kumar kanani 2009).

There are three main types of blood donors, voluntary non-remunerated; family or replacement; and remunerated or paid. The supply of safe blood can only be guaranteed with the help of regular, voluntary, non-remunerated blood donation is the safest form of blood donations. These types of donors are considered as safest because it has been seen that the prevalence of transfusion transmitted infections is lowest among these donors and seropositive of transfusion, transmitted diseases is greater in replacement blood donors than voluntary donors (Global Journal Transfusion Medicine).

According to World Health
Organization (WHO), young people should be the special target group because they from great part full of zeal and enthusiasm. They can be educated to become voluntary donors when they reach the legal accepted age group so we can inspire to become regular non-remunerated blood donors.

**OBJECTIVES**

To assess the knowledge of undergraduate students of Engineering College before and after administration of leaflet on blood donation at LD Engineering College of Ahmedabad city.

**HYPOTHESIS**

The mean post-test knowledge of students of Engineering before and after administration of guideline on blood donation at Engineering College of Ahmedabad city.

**METHODOLOGY**

**Research approach:** A quantitative research approach was used for this study.

**Research design:** A quasi experimental non randomized one group pretest posttest was used.

**Variable:**

**Dependent variable:** Knowledge level of engineering students regarding Blood donation.

**Demographic variable:** A variable that is collected by researchers to describe the nature and distribution of the sample used with inferential statistics.

**Population:** The population include selected students of engineering college Ahmedabad.

**Sample:** Under graduate students of engineering college.

**Sample size:** 100 subject who fulfill inclusion criteria.

**Sampling technique:** Convenient sampling technique.
Description of tool: The structure knowledge questionnaire was developed for present study to assess the knowledge of students regarding blood donation.

Section I
This tool was constructed by the investigator. It contains items such as age and gender.

Section II
It consists of 24 questions regarding introduction, reasons, importance, contra-indications, myths, instructions for blood donation.

<table>
<thead>
<tr>
<th>Areas</th>
<th>No. of questions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1,2,3,4</td>
<td>4</td>
</tr>
<tr>
<td>Reasons for blood donation</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Importance</td>
<td>6,7,8</td>
<td>3</td>
</tr>
<tr>
<td>Indications</td>
<td>9,10</td>
<td>2</td>
</tr>
<tr>
<td>Contra indications</td>
<td>11,12,13,14</td>
<td>4</td>
</tr>
<tr>
<td>Myths</td>
<td>15,16</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>17,18,19,20,21,22,23,</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>

Validity: Content validity of the tool was evaluated by 4 experts. In that 1 mental health nursing, 1 obstetrics and gynecology, 2 M.Sc. in medical surgical nursing.

Pilot study: 100 sample were collected who study at engineering college Ahmedabad.

Data collection procedure: A formal permission was obtained from Dr.
Ghanshyam Vadodariya, Principal. Objectives of the study were discussed and consent for participation in the study was taken from the selected sample. The investigator assured the subject and the confidentiality of the data. The duration of data collection was 1 hour and sample were collected by convenient sampling technique.

Plan for data analysis: “Analysis is the process of organizing and synthesizing data so as to answer research questions. Analysis enter intoa research in one form or another from the very beginning.” We planned analysis through statistical data analysis and we counted mean and mean score percentage.

Table 2. Mean, Mean difference, calculated ‘t’ value of the pretest and posttest knowledge score of samples.

<table>
<thead>
<tr>
<th>Knowledge test</th>
<th>Mean</th>
<th>Mean difference</th>
<th>Calculated ‘t’ value</th>
<th>Tabulated ‘t’ value</th>
<th>Level of Significance</th>
<th>DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre test</td>
<td>12.14</td>
<td>12.36</td>
<td>14.25</td>
<td>2.05</td>
<td>0.05</td>
<td>49</td>
</tr>
<tr>
<td>Post test</td>
<td>19.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Reveals the comparison between pretest and posttest knowledge scores obtained from the samples. The mean pretest score is 12.14 and the mean post test score is 19.52 with mean difference of 12.36 Which was found to be statistically significant as evident from calculated ‘t’ value 14.25 for df 49 and the tabulated ‘t’ value is 2.05 at 0.05 level of significance. The above table reveals that the mean posttest knowledge score is significantly higher than the mean pretest knowledge score. The calculated ‘t’ value (t=14.25) is more than the tabulated ‘t’ value (t= 2.05) therefore the null hypothesis $H_0$ is rejected.
CONCLUSION:
From the study conclusion can be drawn as follow:

We found knowledge level among the students of LD College of Engineering regarding blood donation. Majority 83 (83%) study samples have excellent knowledge regarding blood donation, 16 (16%) study samples have good knowledge regarding blood donation and 1 (1%) study samples have average knowledge regarding blood donation.

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JOURNALS
Published


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