

**AWARENESS, KNOWLEDGE AND ATTITUDE TOWARDS BLOOD DONATIONS IN  
COLLEGE GOING MALE AND FEMALE STUDENTS**<sup>1</sup>\*Ananya Sharma, <sup>2</sup>Shreya Adhikari and <sup>3</sup>Dr. S. Bhattacharya<sup>1,2</sup>Medical Students at Rajiv Gandhi Medical College & CSM Hospital, Maharashtra, India.<sup>3</sup>Professor & Head Department of Physiology, at Rajiv Gandhi Medical College & CSM Hospital, Maharashtra, India.**\*Corresponding Author: Ananya Sharma**

Medical Students at Rajiv Gandhi Medical College &amp; CSM Hospital, Maharashtra, India.

Article Received on 11/07/2023

Article Revised on 31/07/2023

Article Accepted on 21/08/2023

**ABSTRACT**

It is a cross-sectional study. Total number of participants were 110. Among the respondents 50.9% were female students & 49.1% were male students. Their age group was between 18 to 23 years. 96.4% of the students knew their own blood group. 14.55% of the respondents donated blood. 100% of the participant students agreed about blood donation is necessary to save lives. The donation of blood is tremendously needed in the health care facilities.

**KEYWORDS:** Blood donation, Awareness, College Students.**INTRODUCTION**

Safe blood is critical for proper medical care. Access to safe blood is an important factor in preventing the spread of infectious diseases at a global level. Transfusion of blood and its related products is still one of the major medical interventions utilized in treatment of serious conditions such as trauma, surgery & chemotherapy.<sup>[1]</sup> Educational institutions across India houses many potential donors in the form of young & healthy students which can meet the safe blood requirements of our country.<sup>[2]</sup> Blood scarcity is frequently encountered in health-care settings.<sup>[3]</sup> Blood donation is a major concern

to the society as donated blood is lifesaving for individuals who need it.<sup>[4]</sup>

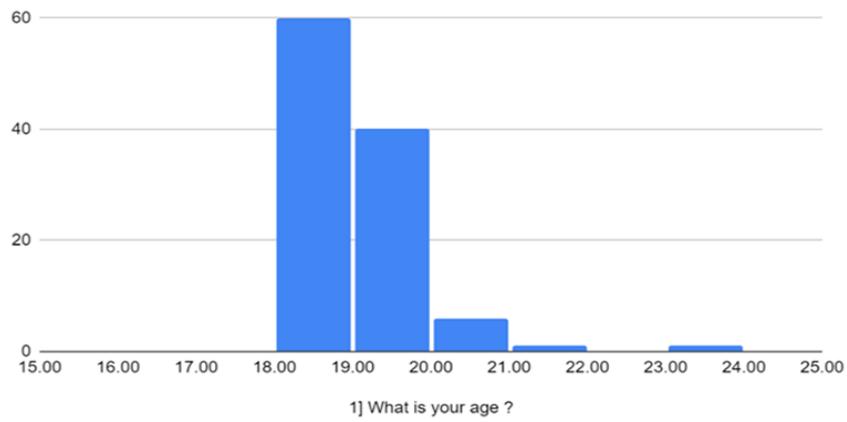
**MATERIALS AND METHODS**

It is a cross-sectional study which was conducted among 110 adults college going students in Maharashtra, India. The questionnaire was provalidated & uploaded via Google form. The age group of the participants were between 18 to 23 years. Those who agreed to take part in this study were included. Statistical analysis was carried out as per the responses received.

**RESULTS AND DISCUSSION**

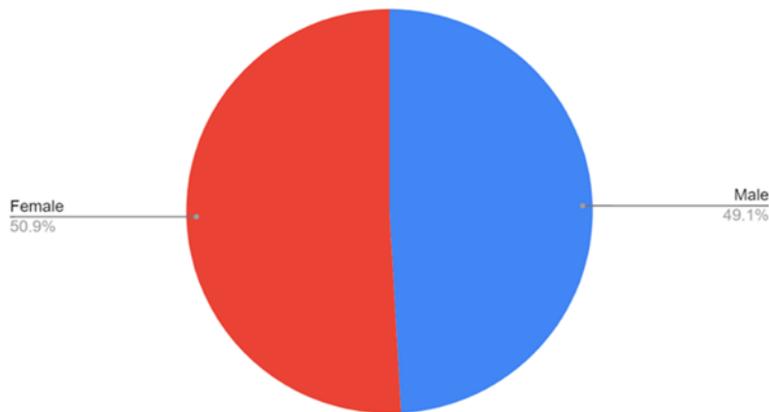
| Sr. No. | Age | No | Percentage |
|---------|-----|----|------------|
| 1       | 18  | 62 | 55.36      |
| 2       | 19  | 40 | 35.71      |
| 3       | 20  | 6  | 5.36       |
| 4       | 23  | 1  | 0.89       |
| 5       | 21  | 1  | 0.89       |

Histogram of 1] What is your age ?



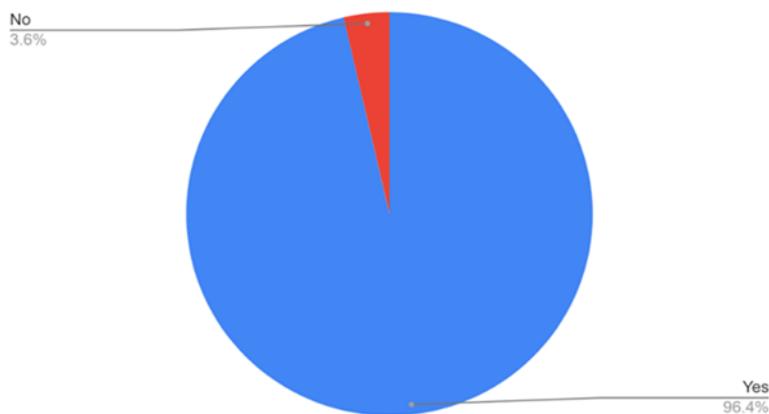
| Sr No | Gender | No | Percentage |
|-------|--------|----|------------|
| 1     | Female | 56 | 50.91      |
| 2     | Male   | 54 | 49.09      |

Count of 2] What is your gender?



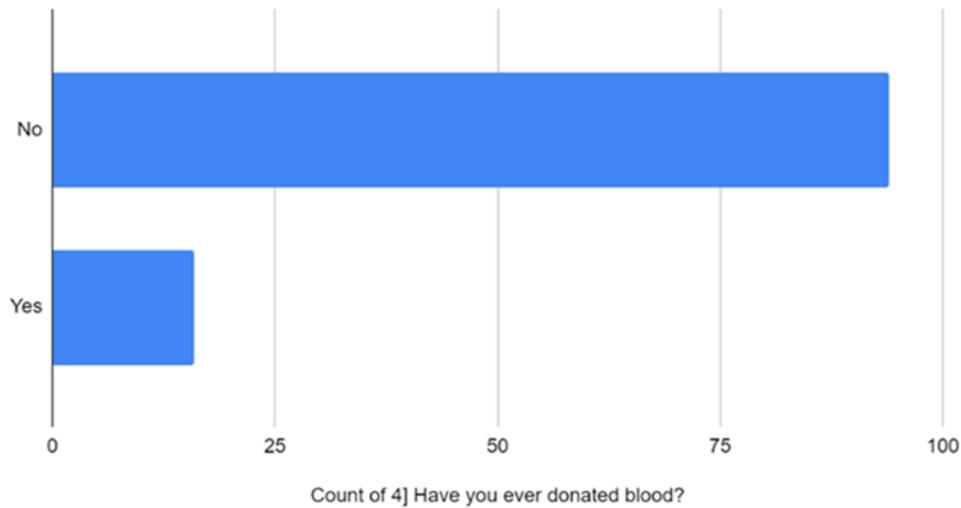
| Sr No | Blood Group Info | Nos | Percentage |
|-------|------------------|-----|------------|
| 1     | Yes              | 106 | 96.36      |
| 2     | No               | 4   | 3.64       |

Count of 3] Do you know what your blood group is?



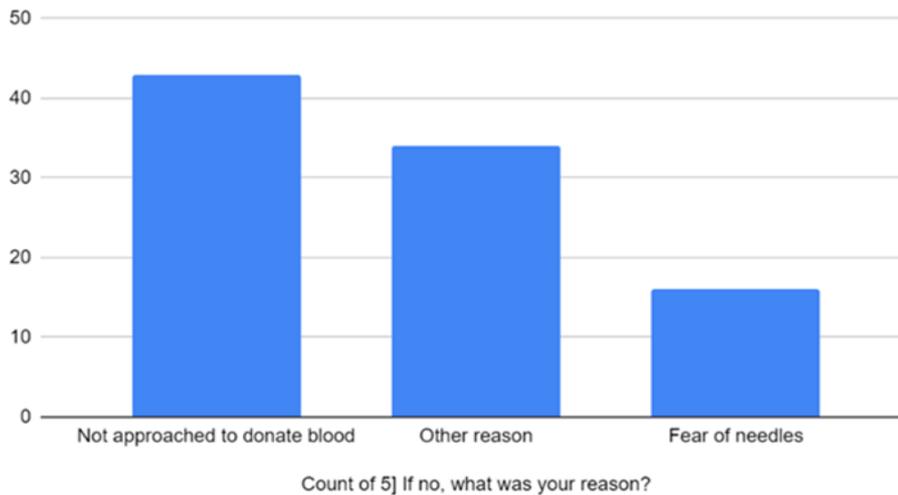
| Sr. No. | Blood Donation Done/Not Done | Nos | Percentage |
|---------|------------------------------|-----|------------|
| 1       | No                           | 94  | 85.45      |
| 2       | Yes                          | 16  | 14.55      |

Count of 4] Have you ever donated blood?



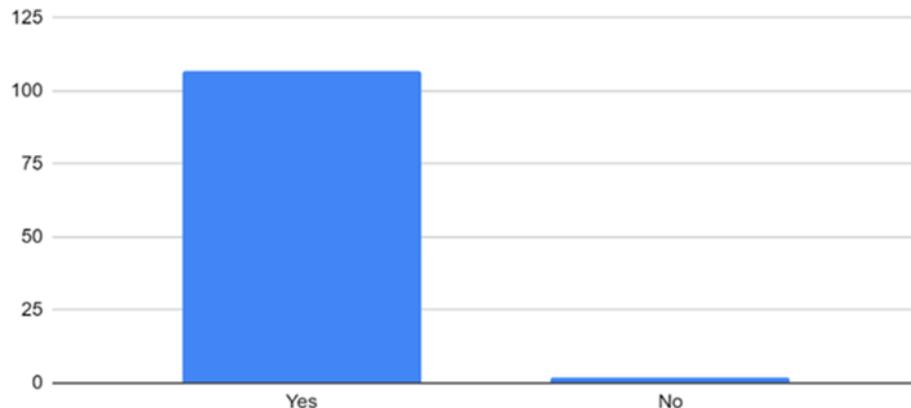
| Sr. No | Reason for no donating blood | Nos | Percentage |
|--------|------------------------------|-----|------------|
| 1      | Not Approached for donation  | 43  | 39.09      |
| 2      | Other reasons                | 34  | 30.91      |
| 3      | Blank                        | 17  | 15.45      |
| 4      | Fear of needles              | 16  | 14.55      |

Count of 5] If no, what was your reason?



| Sr. No | Blood donation saves lives | Nos | Percentage |
|--------|----------------------------|-----|------------|
| 1      | Yes                        | 107 | 97.27      |
| 2      | No                         | 2   | 1.82       |
| 3      | Blank                      | 1   | 0.91       |

Count of 6] Do you think blood donation is necessary to save lives?

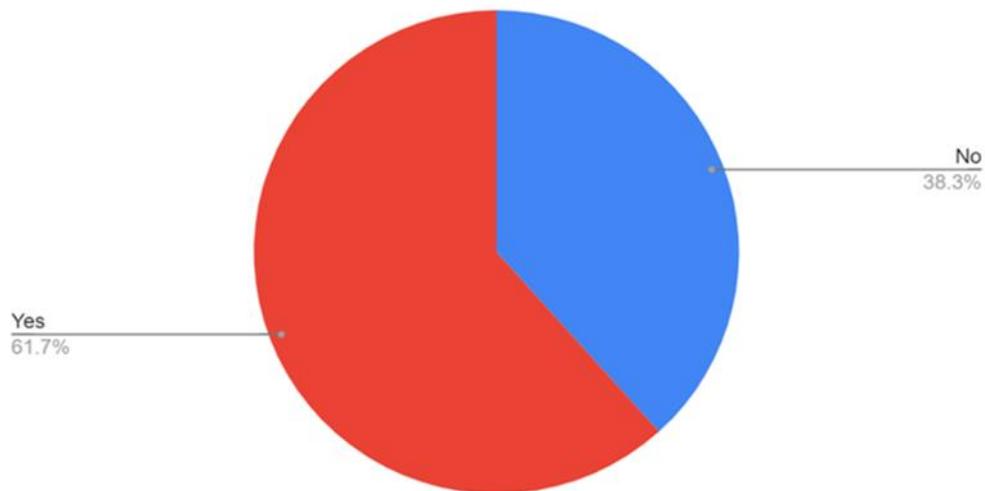


Count of 6] Do you think blood donation is necessary to save lives?

| Sr. No | Min Hemoglobin>12.5gm/deciliter | Nos | Percentage |
|--------|---------------------------------|-----|------------|
| 1      | Yes                             | 66  | 60.00      |
| 2      | No                              | 41  | 37.27      |
| 3      | Blank                           | 3   | 2.73       |

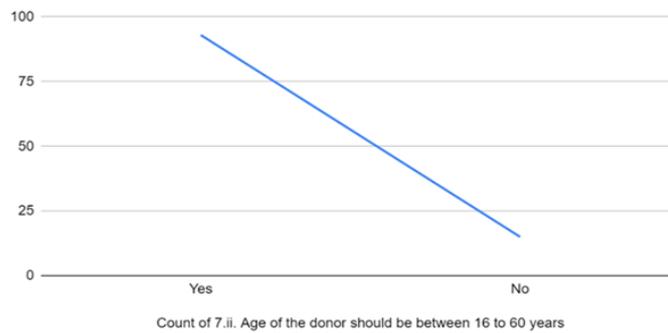
Count of 7] Do you know the criteria for donating blood?

7.i. Minimum hemoglobin level should be more than 12.5 gra...



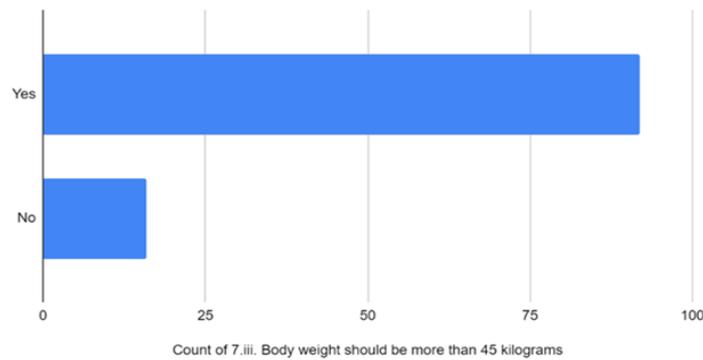
| Sr. No | Age of donor between 16 to 60 | Nos | Percentage |
|--------|-------------------------------|-----|------------|
| 1      | Yes                           | 93  | 84.55      |
| 2      | No                            | 15  | 13.64      |
| 3      | Blank                         | 2   | 1.82       |

Count of 7.ii. Age of the donor should be between 16 to 60 years



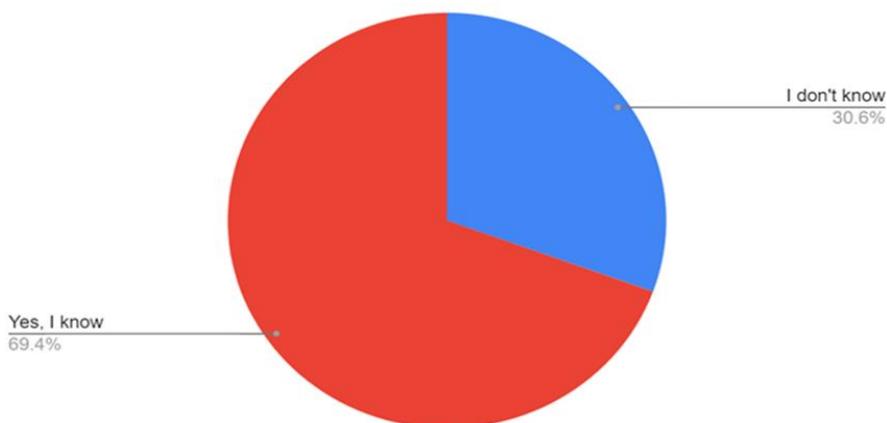
| Sr. No | Body Weight>45Kg | Nos | Percentage |
|--------|------------------|-----|------------|
| 1      | Yes              | 92  | 83.64      |
| 2      | No               | 16  | 14.55      |
| 3      | Blank            | 2   | 1.82       |

Count of 7.iii. Body weight should be more than 45 kilograms



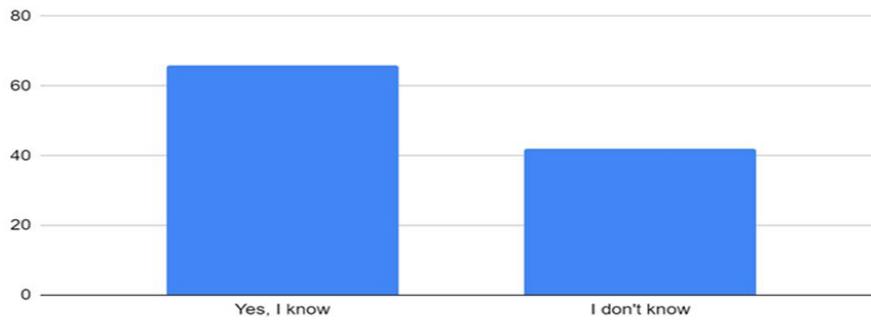
| Sr. No | Donor Should not have undergone treatment for rabies/Hepatitis in last one year | No | Percentage |
|--------|---|----|------------|
| 1      | Yes   | 75 | 68.18      |
| 2      | Don't Know  | 33 | 30.00      |
| 3      | Blank   | 2  | 1.82       |

Count of 7.iv. Person should not have undergone treatment for rabies or hepatitis in the past one year



| Sr. No | Person should not have donated blood in last 3 months | Nos | Percentage |
|--------|---|-----|------------|
| 1      | Yes   | 66  | 60.00      |
| 2      | No  | 42  | 38.18      |
| 3      | Blank   | 2   | 1.82       |

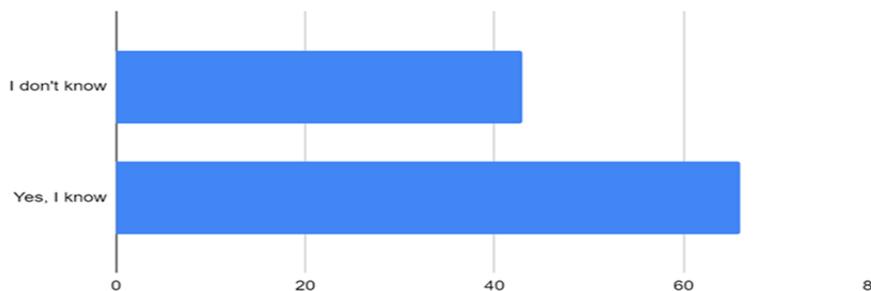
Count of 7.v. Person should not have donated blood in the past three months



Count of 7.v. Person should not have donated blood in the past three months

| Sr. No | No Malaria Treatment in last 3 months | Nos | Percentage |
|--------|---------------------------------------|-----|------------|
| 1      | Yes                                   | 66  | 60.00      |
| 2      | Don't Know                            | 43  | 39.09      |
| 3      | Blank                                 | 1   | 0.91       |

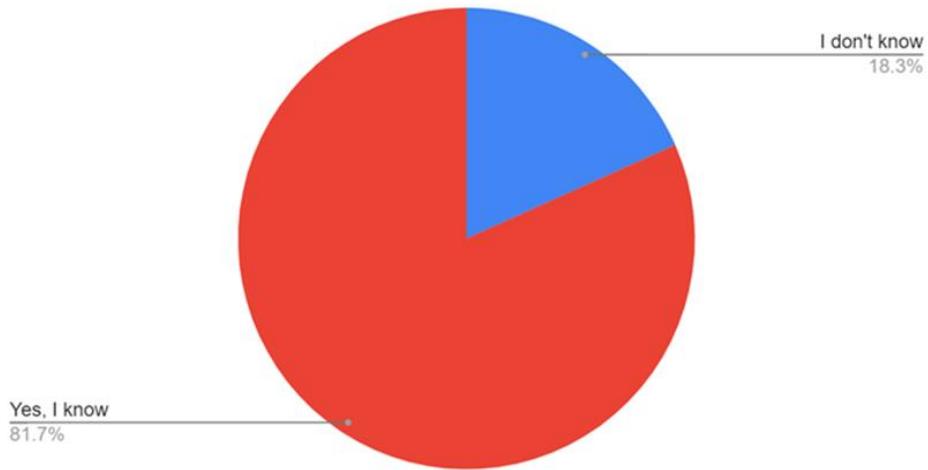
Count of 7.vi. Person should not be treated for malaria in the past three months



Count of 7.vi. Person should not be treated for malaria in the past three months

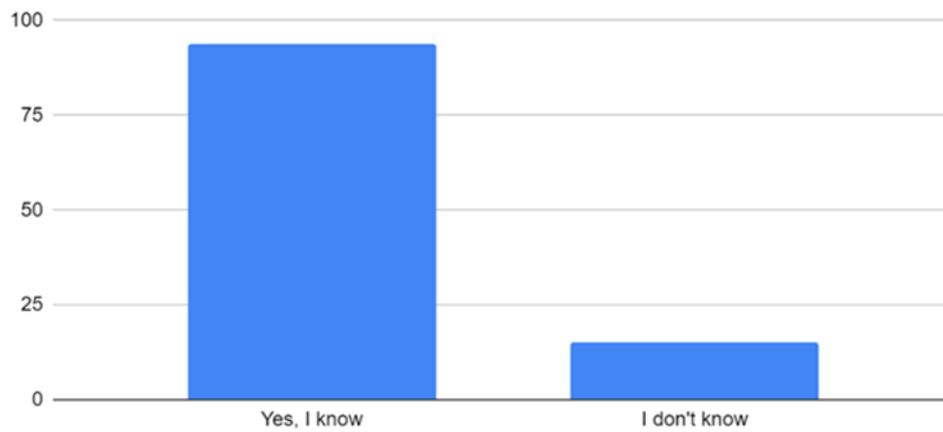
| Sr. No | Women Donors Should not be pregnant or lactating | Nos | Percentage |
|--------|--|-----|------------|
| 1      | Yes  | 89  | 80.91      |
| 2      | I Don't Know                                     | 20  | 18.18      |
| 3      | Blank  | 1   | 0.91       |

Count of 7.vii. Woman donor should not be pregnant or lactating



| Sr. No | Person SHould be diabetes free/Heart Disease free | Nos | Percentage |
|--------|---|-----|------------|
| 1      | Yes   | 94  | 85.45      |
| 2      | No  | 15  | 13.64      |
| 3      | Blank   | 1   | 0.91       |

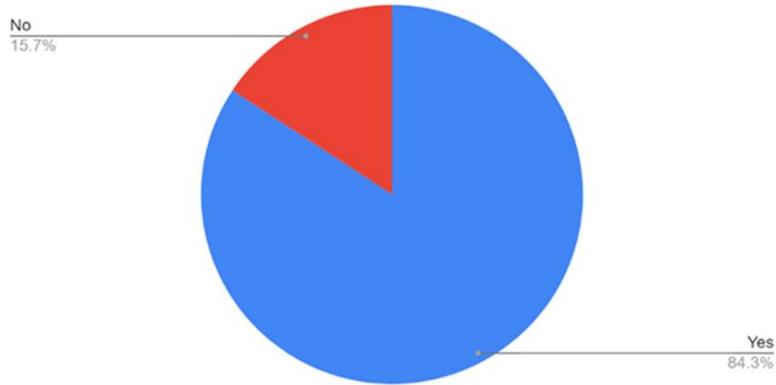
Count of 7.viii. Person should be free of diabetes or heart disease



Count of 7.viii. Person should be free of diabetes or heart disease

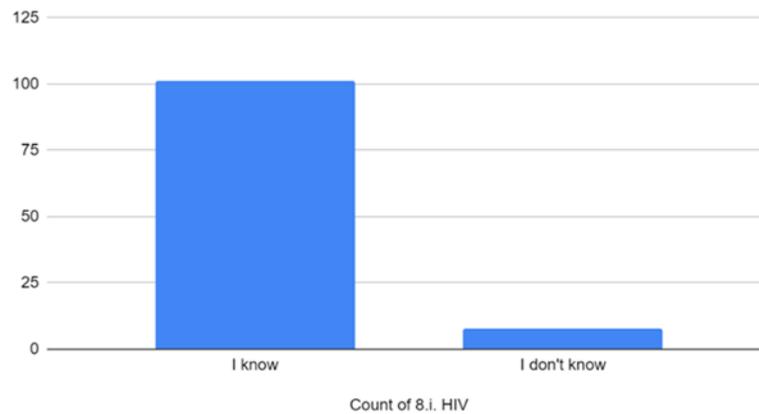
| Sr. No | Do You know diseases that can be transmitted through blood transfusion | Nos | Percentage |
|--------|--|-----|------------|
| 1      | Yes  | 91  | 82.73      |
| 2      | No   | 17  | 15.45      |
| 3      | Blank  | 2   | 1.82       |

Count of 8] Do you know the diseases that can be transmitted through blood transfusion?



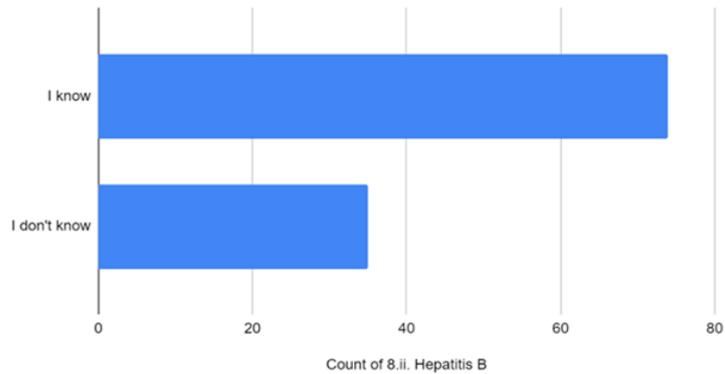
| Sr. No | HIV   | Nos | Percentage |
|--------|-------|-----|------------|
| 1      | Yes   | 101 | 91.82      |
| 2      | No    | 8   | 7.27       |
| 3      | Blank | 1   | 0.91       |

Count of 8.i. HIV



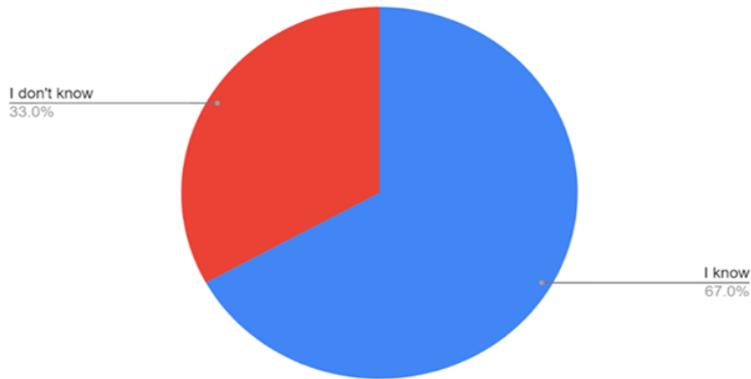
| Sr. No | Hep B      | Nos | Percentage |
|--------|------------|-----|------------|
| 1      | I Know     | 74  | 67.27      |
| 2      | Don't Know | 35  | 31.82      |
| 3      | Blank      | 1   | 0.91       |

Count of 8.ii. Hepatitis B



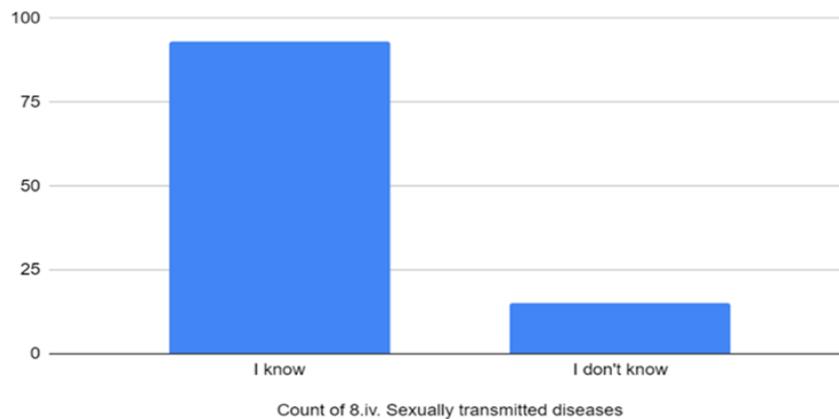
| Sr. No | Malaria | Nos | Percentage |
|--------|---------|-----|------------|
| 1      | Yes     | 73  | 66.36      |
| 2      | No      | 36  | 32.73      |
| 3      | Blank   | 1   | 0.91       |

Count of 8.iii. Malaria



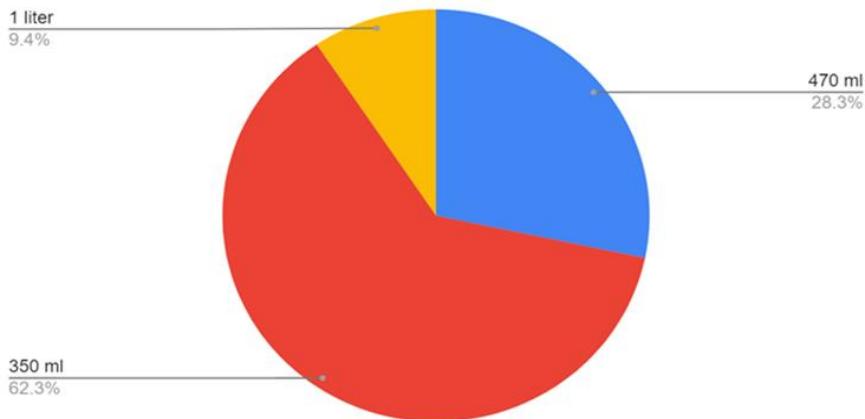
| Sr. No | Sexually Transmitted diseases | Nos | Percentage |
|--------|-------------------------------|-----|------------|
| 1      | I know                        | 93  | 84.55      |
| 2      | Don't Know                    | 15  | 13.64      |
| 3      | Blank                         | 2   | 1.82       |

Count of 8.iv. Sexually transmitted diseases



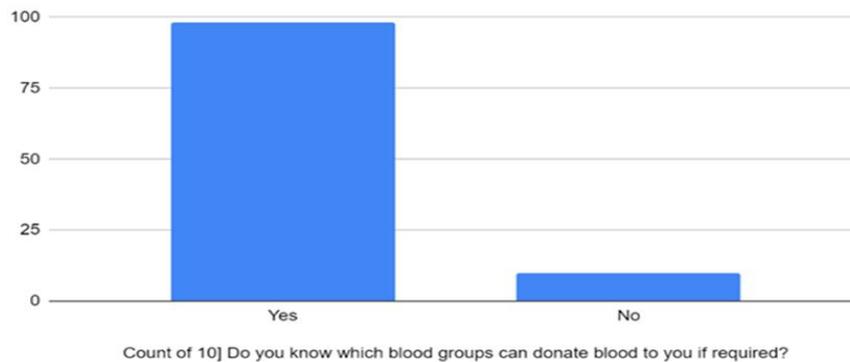
| Sr. No | Quantity of blood donated at one go | Nos | Percentage |
|--------|-------------------------------------|-----|------------|
| 1      | 350 ml                              | 66  | 60.00      |
| 2      | 470 ml                              | 30  | 27.27      |
| 3      | 1 lit                               | 10  | 9.09       |
| 4      | Blank                               | 4   | 3.64       |

Count of 9] How much blood do you think can be donated at one go?



| Sr. No | Do you know which blood groups can be donate blood to you if required | Nos | Percentage |
|--------|---|-----|------------|
| 1      | Yes   | 98  | 89.09      |
| 2      | No  | 10  | 9.09       |
| 3      | Blank   | 2   | 1.82       |

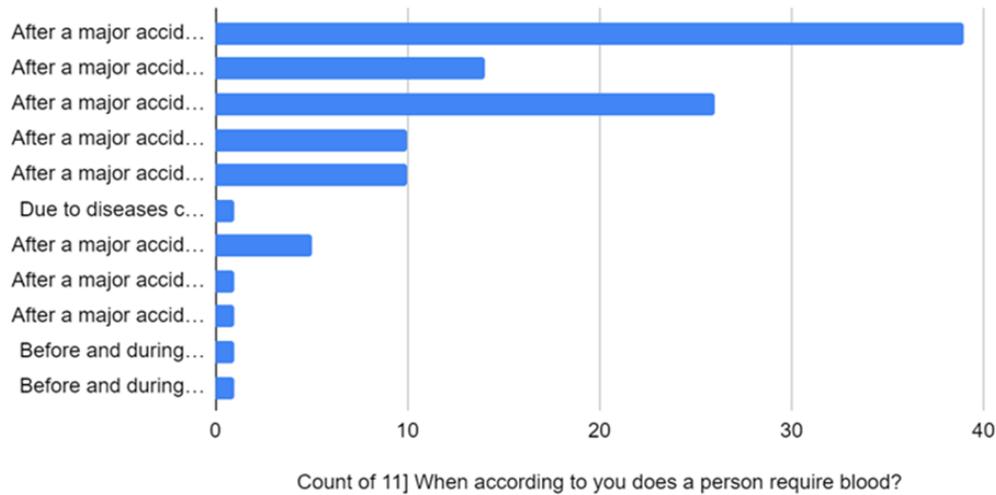
Histogram of Count of 10] Do you know which blood groups can donate blood to you if required?



| Sr. No | When does a person require blood  | Nos | Percentage |
|--------|---|-----|------------|
| 1      | 1. After a major accident causing blood loss<br>2. Before & during operations<br>3. Due to disease causing blood loss<br>4. During pregnancy for the growing baby | 14  | 12.73      |
| 2      | 1. After a major accident causing blood loss<br>2. Before & during operations<br>3. Due to disease causing blood loss   | 39  | 35.45      |
| 3      | 1. After a major accident causing blood loss<br>2. Before & during operations<br>3. During pregnancy for the growing baby   | 1   | 0.91       |
| 4      | 1. After a major accident causing blood loss<br>2. Due to disease causing blood loss<br>3. During pregnancy for the growing baby                                  | 5   | 4.55       |
| 5      | 1. After a major accident causing blood loss<br>2. Before & during operations   | 10  | 9.09       |
| 6      | 1. After a major accident causing blood loss<br>2. Due to disease causing blood loss  | 26  | 23.64      |

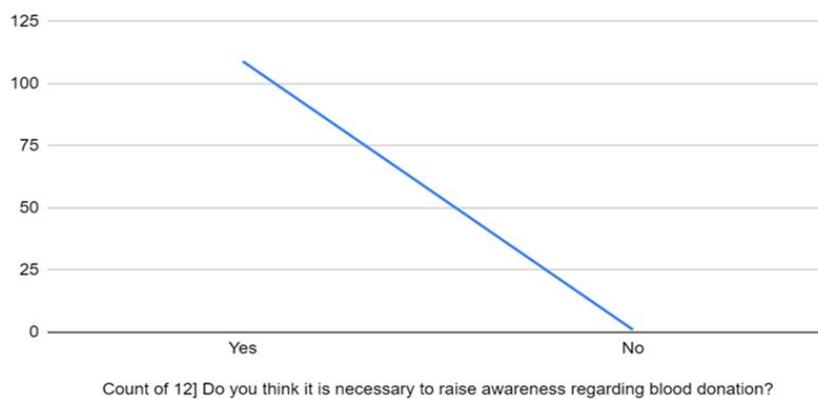
|    |   |    |      |
|----|---|----|------|
| 7  | 1. After a major accident causing blood loss<br>2. During pregnancy for the growing baby" | 1  | 0.91 |
| 8  | 1. Before & during operations<br>2. Due to disease causing blood loss                     | 1  | 0.91 |
| 9  | 1. After a major accident causing blood loss  | 10 | 9.09 |
| 10 | 1. Before & during operations   | 1  | 0.91 |
| 11 | 1. Due to disease causing blood loss  | 1  | 0.91 |
| 12 | Blank   | 1  | 0.91 |

Count of 11] When according to you does a person require blood?



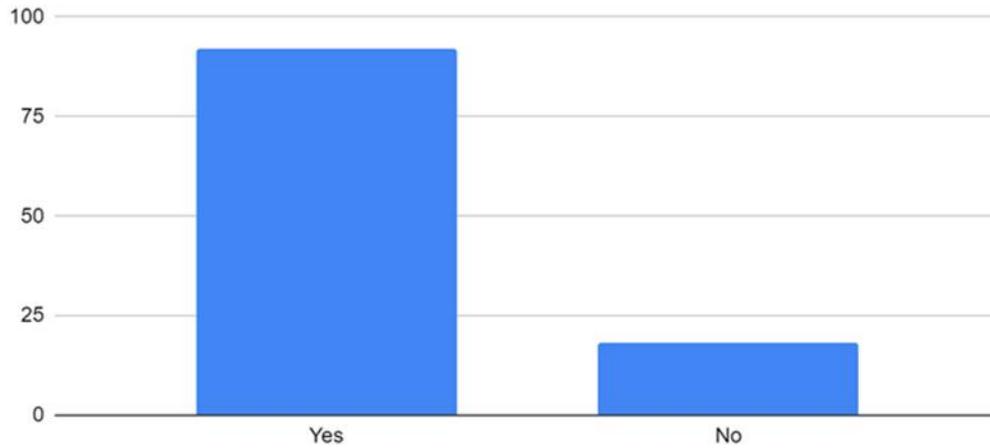
| Sr. No | DO you think it is necessary to raise awareness regarding blood donation | Nos | Percentage |
|--------|--|-----|------------|
| 1      | Yes  | 109 | 99.09      |
| 2      | No   | 1   | 0.91       |

Count of 12] Do you think it is necessary to raise awareness regarding blood donation?



| Sr. No | will you take part in blood donation awareness drive | Nos | Percentage |
|--------|--|-----|------------|
| 1      | Yes  | 92  | 83.64      |
| 2      | No   | 18  | 16.36      |

Count of 13] Will you take part in awareness programs to promote blood donation?



Count of 13] Will you take part in awareness programs to promote blood donation?

| Sr. No | Where have you heard of blood donation  | Nos | Percentage |
|--------|---|-----|------------|
| 1      | 1. Educational Institution<br>2. Workplace<br>3. Social Circle<br>4. Social Media<br>5. Other | 5   | 4.55       |
| 2      | 1. Educational Institution<br>2. Workplace<br>3. Social Circle<br>4. Social Media             | 17  | 15.45      |
| 3      | 1. Educational Institution<br>2. Workplace<br>3. Social Circle<br>4. Other                    | 1   | 0.91       |
| 4      | 1. Educational Institution<br>2. Social Circle<br>3. Social Media<br>4. Other                 | 2   | 1.82       |
| 5      | 1. Educational Institution<br>2. Workplace<br>3. Social Media<br>4. Other                     | 2   | 1.82       |
| 6      | 1. Educational Institution<br>2. Social Circle<br>3. Social Media                             | 23  | 20.91      |
| 7      | 1. Educational Institution<br>2. Social Media<br>3. Other                                     | 3   | 2.73       |
| 8      | 1. Social Circle<br>2. Social Media<br>3. Other   | 1   | 0.91       |
| 9      | 1. Educational Institution<br>2. Social Circle  | 6   | 5.45       |
| 10     | 1. Educational Institution<br>2. Social Media<br>5. Other                                     | 17  | 15.45      |



10. Talal A etal. Prevalence of transfusion- transmitted infections (HEV, HIV, Syphilis & Malaria) in blood donors. A large scale cross sectional study Pathogens, 2022; 11: 726-737.
11. Andrew A A & Others. Prevention of antibodies to syphilis among blood donors in Aeera, Ghana. Jpn.J Infect. Dig, 2003; 56: 65-167.