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'KNOWLEDGE AND ATTITUDE REGARDING BLOOD DONATION AMONG THE ADULTS IN SELECTED AREAS OF GUWAHATI, ASSAM'.

Nursing

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ABSTRACT

World Health Organization (WHO) recommends countries to focus on young people to achieve 100% non remunerated voluntary blood donation by 2020. It's also recommends that all countries should be self-sufficient in all blood procedure and that all blood donation should be voluntary, anonymous, and none remunerated. According to its 2011 report, 107 million blood donations are collected globally, approximately half of these are collected globally, and approximately half of these are collected in the high-income countries, home to 15% of the world's population.

Aim: The aim of the study was to assess the knowledge and attitude of the adults regarding Blood Donation in selected area of Guwahati, Assam.

Methods And Materials: The research approach adopted for the study was quantitative approach. Non-experimental descriptive research design and survey method was used in this study. Convenience sampling technique was used to select the samples. The sample size was 100 adult of age 21-60 years. Study was conducted in selected areas of Guwahati, Assam, who fulfilled the inclusion criteria. The tools used for the study were structured questionnaire and modified 3point Likert scale to assess the knowledge and attitude regarding blood donation.

Results: Data analysis was done by calculating mean, standard deviation and chi square test. A total of 100 adults from selected areas of Guwahati, Assam participated in this study. It was found that majority ie 46% of the respondents had adequate knowledge, 45% had moderately adequate knowledge and 9% respondents had inadequate level of knowledge. It was also found that 88% of the respondents had favourable attitude and 12% had unfavourable attitude regarding blood donation. There was significant association of knowledge with education level. However there was no significant association of knowledge with age, gender, occupation, marital status, religion and sources of information. There was also significant association of attitude with occupation but it was found that there was no significant association of attitude with age, gender, marital status, religion, marital status and sources of information. Correlation between knowledge and attitude of adult regarding blood donation was found to be 0.43, which infers that there was moderately correlation between knowledge and attitude.

Conclusion: Through this study, the investigator concluded that adults are adequately aware regarding blood donation and more adults have favourable attitude towards blood donation.

KEYWORDS

knowledge, attitude, blood donation, adults.

INTRODUCTION

In spite of extensive promising research, true substitute for blood and blood components (red blood cells, platelets, blood clotting factors, fresh frozen plasma or white blood cells) will not be available for many years. Therefore, blood donation by human will continue to be the major sources for blood and blood components. Donated blood can be lifesaving for individuals who have lost large volume of blood from serious accidents, obstetric and gynaecological haemorrhages, or surgery and stem cell transplant patient as well as for individuals who have symptomatic anaemia from medical or hematologic conditions or cancers.[1]

Blood transfusion is the transfer of blood or blood components from the donor into the bloodstream of the recipient. It is a life-saving scheme in both routine and emergency situations to replace blood cells or blood products lost through bleeding.[2] Blood donation is philanthropic deep in which the blood of a healthy person had been voluntarily for the purpose of transfusion.[3] World Health Organization (WHO) recommends countries to focus on young people to achieve 100% non remunerated voluntary blood donation by 2020. It is also recommends that all countries should be self-sufficient in all blood procedure and that all blood donation should be voluntary, anonymous, and none remunerated. According to its 2011 report, 107 million blood Donation are collected globally, approximately half of these are collected globally, approximately half of these are collected in the high-income countries, home to 15% of the world's population.[4]

The attitude, beliefs, and level of knowledge associated with blood donation may affect the disposition of potential donors to blood donation. Health workers are expected to have a good knowledge of blood usage, to be aware of the increasing demand and scarcity of the products.[5] Moreover, it should be understood that blood supplies are sufficient, in balance with demand and are gathered from low-risk population. For this reason, health workers are expected to practice blood donation so as to create a good image to the public. Hence, the study was aimed at assessing knowledge and attitude regarding blood donation among the adults.[6]

OBJECTIVE:

1. To assess the knowledge regarding the blood donation among the adults in selected areas of Guwahati Assam.
2. To assess the attitude regarding the blood donation among the adults in selected areas of Guwahati, Assam.
3. To find out the association between knowledge and demographic variable regarding blood donation among the adults in selected areas of Guwahati, Assam.
4. To find out the association between attitude and demographic variable regarding blood donation among the adults in selected areas of Guwahati, Assam
5. To find out the co-relation between knowledge and attitude regarding the blood donation among the adults in selected areas of Guwahati, Assam.

REVIEW OF LITERATURE

Section I: Literature Related To Knowledge On Blood Donation

Kanani AN, et al. (2018) conducted a random cross-sectional study in Gujarat on knowledge and awareness about blood donation among government medical, Para-medical and nursing student. The response was gathered from a total of 500 respondents who voluntary participated in the study. Out of them 31.52% (n=165) males and 14.03% (n=335) females donated blood in their lifetime. Among MBBS student, 90.19% (n-1100) had shown a good level of knowledge, whereas dental, ayurvedic, physiotherapy and nursing student respondents showed the same by 78.27%, 71.64%, 89.55% and 76.2% respectively. Among factors that hindered the study cases from donating blood, the most important was that they were never approached by anyone for blood donation.[7]

Section II: Literature Related To Attitude On Blood Donation

Anwer M O, et al. (2016) conducted a cross- sectional study on attitude towards blood donation among medical and non- medical student in Karachi. Mean age of the student was found to be between 21 and 23 (64.6%) in medical, whereas in nonmedical, 66.7% fell in this age group. Astonishingly, blood donors in nonmedical (27%) were quite more than that in medical group, where they only 18%. Males

constituted the majority in both of the groups. Most commonly reported factor that motivated blood donation in medical group was feeling of self-satisfaction (40.2%), whereas in nonmedical group, 32.9% reported that they had only donated blood when their friends/ family were in need. Among the factors that impeded our subjects from donating blood were primarily health concerns in medical student(19%), whereas in nonmedical students they claimed they were not approached by anyone and were unaware of the importance of blood donation (34.8%). [8]

RESEARCH METHODOLOGY

Research Approach: Quantitative research
Research Design: Survey research design
Research Variable: Knowledge and Attitude
Demographic Variable: In this study the demographic variables are age, gender, educational qualification, occupation, marital status, religion and source of information.

Setting Of The Study: Urban areas community, Guwahati, Assam.
Population: Adults
Target Population: adults residing in Guwahati.
Accessible Population: Adults residing in urban community, Guwahati, Assam.

Sample: Adults residing in urban community, Guwahati, Assam and who full fills the inclusion criteria.

Sample size: 100

Inclusion Criteria: In this study, the inclusion criteria were-
a. Adults who were present at the time of the study
b. Adults who could not read and write Assamese or English.

Exclusion Criteria: In this study, the exclusion criteria were-
a. Adults who had donated blood.
b. Adult who were willing to participate.

Tools And Technique:
Semi- structured knowledge questionnaire and 3 point liker scale was used to assess the level of attitude of the adults and the technique was self – report.

Scoring Key:
Section I: Semi-structured knowledge questionnaire on Blood Donation.

The correct answer was given score of 1(one) and wrong answer score 0 (zero). The total score on knowledge regarding Blood Donation was 14.

Category Of Knowledge Level
Inadequate knowledge = <33% (<9)
Moderately adequate knowledge = 33-66 % (5-9)
Adequate knowledge = >66 % (>5)

Section III: The modified Likert scale which was prepared to know the attitude of eligible adults regarding blood donation. Total 10statement were included in the Likert scale of which 5 statements were positive statement and 5 were negative statement.

Scoring Key-
The attitude scale consist of total 10 statement, response of the eligible women is elicited the degree to which they agree, uncertain and disagree with their opinion expressed in the statement.

With three response alternative, a score of 3 would be given to those agree, 2 to those uncertain and 1 to disagree for positive statements and 1 those agree, 2 those uncertain and 3 to disagree for negative statement.

The level of attitude was categorized as follows-
Favourable = ≥ 15
Unfavourable = < 15

Content Validity of the Tool:
The prepared instrument along with the problem statement and objective was submitted to five experts of medical surgical nursing, three expert of community health nursing and 1 experts of Microbiology for establishing content validity.

Reliability Of The Tool:
The reliability of the tool was done by using Split half method for knowledge questioner and test-retest method was used for attitude. It was revealed that the tool was reliable as reliability of the questionnaire was 0.95. And the attitude items were also found to be reliable as the reliability was 1 to proceed with the main study.

Pilot Study:
The pilot study was conduct from 18th to 23rd June, 2018. 13 samples were selected using convenience sampling technique. And the study was found to be feasible.

Main Study: 2nd – 28th July, 2018.

RESULTS

Table I: Frequency And Percentage Distribution Of Respondents According To Demographic Variables N=100

VARIABLES		FREQUECNCY (f)	PERCENTAGE (%)
a) Age	21-30 years	36	36%
	31-40 years	24	24%
	41-50 years	28	28%
	51-60 years	12	12%
b) Gender	Male	43	43%
	Female	57	57%
c)Educational status	Primary school	14	14%
	Middle school	22	22%
	High school	19	19%
	Higher secondary school	21	21%
	Graduate and above	24	24%
d) occupation	Unemployed	13	13%
	Business	26	26%
	Government service	15	15%
	Private service	13	13%
	Daily wager/ laborer	7	7%
	House wife	26	26%
E) Marital Status	Unmarried	32	32%
	Married and divorce	54	54%
	Widow	14	14%
f) Religion	Hindu	70	70%
	Muslim	24	24%
	Christian	6	6%
	Any other	0	0%
g) Awareness on blood Donation	Yes	100	100%
	No	0	0%
f) Source of information	Mass media	39	39%
	Health personal	25	25%
	Friends and relatives	28	28%
	Family member	8	8%

Table-II: Frequency And Percentage Distribution Of Respondents According To The Level Of Knowledge N=100

LEVEL OF KNOWLEDGE	FREQUENCY (f)	PERCENTAGE (%)	MEAN	SD	RANGE OF SCORE	TOTAL SCORE
Adequate (>66%) (>9 marks)	46	46%	8.74	2.81	3-14	14
Moderately Adequate (33-66%) (5-9 marks)	45	45%				
Inadequate (<33%) (<5marks)	9	9%				
Total (15Marks)	100	100%				

The result of the study was supported by cross sectional analytic study, conducted by the Singh P, et al, (2017), [9] Sub- Himalayan State

,among adults, where it was showed that more than 90% of the respondents knew the suitable age for blood donation and interval between two blood donations. And Shidam UG, et al. (2015)[10] conducted a cross-sectional in rural ponducherry, India among the adults, where it was showed that Where Out of 288 respondents, 229 subjects (79.5%) were aware that blood could be donated, and only 14.8% of them knew about the correct frequency of blood donation. And the result of the study was contrasted by a cross-sectional study Chennai, in Tamil Nadu, India Manikandan S, et al. (2013)[11] among the adults, where it was showed that overall knowledge on blood donation among respondents was 35.65%, majority of the participants (89.25%) never donated blood in which few of the non-donors had negative attitude (36.41%).

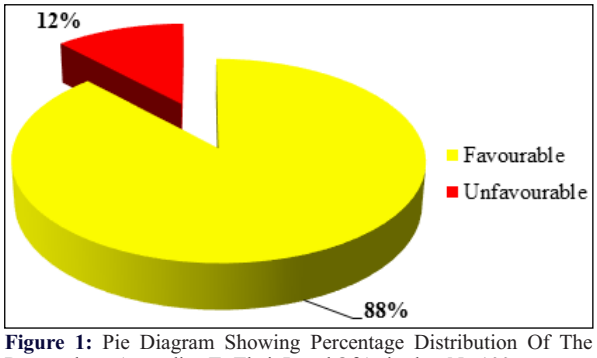

Figure 1: Pie Diagram Showing Percentage Distribution Of The Respondents According To Their Level Of Attitude N=100

The result was supported by the non- experimental research approach conducted by the Kurian RN and Sarkar S (2019)[12] in selected urban area of New Delhi among the general public, where it was showed that 58% had strongly positive attitude regarding blood donation and a cross sectional descriptive study was conducted by Rathod GB, et al. (2012)[13], between health professionals and general population in Pondicherry. Where there was no difference of attitude of the two groups. There was no difference in knowledge and attitudes according to gender but most of the donors were males. There is a need to increase the awareness and attitude among the paramedical staff and in general population.

Table- IV: Association Of Knowledge Of Adult Regarding Blood Donation With Selected Sociodemographic Variables N=100

Variable	Level Of Significa NCE (p- value)	Calculated Value Of ($\chi 2$)	Tabulated Value ($\chi 2$)	df	Remark
Age	0.05	3.4	5.991	2	NS
Gender	0.05	0.0078	3.841	1	NS
Education level	0.05	11.21	3.841	1	S
Occupation	0.05	2.62	3.841	1	NS
Marital Status	0.05	1.98	3.841	1	NS
Religion	0.05	1.96	3.841	1	NS
Source of Information	0.05	2.78	5.991	2	NS

NS- Non significance, S- Significance, df- Degree of freedom

The table IV reveals that there was significant association of knowledge with education level whereas there was no significant association of knowledge with age, gender, occupation, marital status, religion and sources of information of blood donation. The result was supported by the community based cross- sectional study, conducted by Melku M et al. (2016)[14] in community area of Gondar town, Northwest Ethiopia, among the adults, where it was showed that higher education statuses were significantly associated with adequate knowledge towards blood donation

Table- V: Association Between Attitudes Of Adult Regarding Blood Donation With Selected Socio Demographic Variables N=100

VARIABLE	LEVEL OF SIGNIFICANCE (p- value)	CALCULATED VALUE OF ($\chi 2$)	TABULATED VALUE ($\chi 2$)	df	REMARK
Age	0.05	1.33	3.841	1	NS
Gender	0.05	0.522	3.841	1	NS
Education level	0.05	1.35	3.841	1	NS
Occupation	0.05	7.33	3.841	1	S
Marital Status	0.05	0.56	3.841	1	NS
Religion	0.05	1.14	3.841	1	NS
Source of Information	0.05	5.81	5.991	2	NS

NS- Non significance, S- Significance, df- Degree of freedom

The table V reveals that there was significant association of attitude with occupation and there was no significant association of attitude with age, gender, marital status, religion, marital status and sources of information of blood donation. The result was in contrast with other studies conducted by Majdabadi HA et al. (2018) [15]on the students at the Semnan University of Medical Sciences on the association between no significant relationship between gender and attitude towards blood donation (p=0.27).

Table- VI: Correlation Between Knowledge And Attitude Of Adult Regarding Blood Donation N=100

VARIABLES	MEAN	SD	CORRELATION COEFFICIENT (r)
Knowledge	8.74	2.81	0.43
Attitude	24.13	5,2	

SD- Standard Deviation

The table VI reveals that there was correlation between knowledge and attitude of adult regarding blood donation in 0.43, which infers that there was moderately correlation between knowledge and attitude.

CONCLUSION:

From this study, it was observed 100 participants, i.e the adults of selected area of Guwhati, Assam. Out of 100 respondents, i.e majority 46 (46%) respondents had adequate knowledge, 45 (45%) respondents we're had moderately adequate knowledge and nine (9%) respondents have inadequate knowledge. Majority that is 88(88%) respondents were have favourable attitude and 12 (12%) respondents were have unfavourable attitude regarding blood donation. There was significant association of knowledge with education level and there was no significant association of knowledge with age, gender, occupation, marital status, religion and sources of information. There was significant association of attitude with occupation and there was no significant association of attitude with age, gender, marital status, religion, marital status and sources of information.

Correlation between knowledge and attitude of adult regarding blood donation in 0.43, where there was moderately correlation between knowledge and attitude.

Through this study, the investigator concluded that more adults are more aware about blood donation and more adults have favourable attitude towards blood donation.

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