



“KAP” MATERIAL USED FOR VOLUNTARY BLOOD DONATION IN TEZPUR MEDICAL COLLEGE AND HOSPITAL, TEZPUR, ASSAM, INDIA (A RETROSPECTIVE STUDY & PERSONAL EXPERIENCE)

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ABSTRACT

Introduction: Blood transfusion is the simple and single most solution that can help to save lives of the millions. The present conventional system of collection of blood from voluntary, non-remunerate, regular repeated blood donors is the only available tension free, hassle-free system where we have to educate the donor in lieu Blood bank and authority used to receive a quality product for safety of blood transfusion as and when necessary

Aim of study: To study the “KAP” (knowledge, attitude and practices) of common people of Tezpur, Assam towards voluntary blood donation and to counter act the situation to increase and continuous maintenance blood supply as per demand without gap to the Mother blood Bank and it's FRU throughout the year in Tezpur Medical College Blood Bank & BCSU.

Materials and Methods: We conducted a huge campaign that designed to reach and teach the common as well as people, in the Tezpur City /Town and the remote areas, specially donor of aged 18-60 yrs, with the help of State AIDS Control organization (ASACS) and State Blood Transfusion Council (ASBTC) with extended help from local bodies, NGO's, voluntary organization, Insurance companies, Bank, Tea Garden workers, Local College of 12⁺ standard and beyond, mother child org, police, Fire, Water supply, and other charitable and nonprofit orgs with readymade pre donor counseling form with the maintenance of confidentiality for all purpose VBD collection in the mother blood bank at Tezpur Medical College and Hospital, Tezpur, Assam, India.

Observation and Results: The targeted group which consisted mostly age group of 20-60 yrs Male to Female ratio 7.5:2.5 (75% and 25%). Voluntary blood donation is direct impact of population by large and their educational, literacy rate. The most important questions “Who, Why, when and How” has been answered by specific questionnaire prepared by State AIDS Control organization (ASACS) and State Blood Transfusion Council (ASBTC). The using different questions were designed to understand the level of knowledge, the cause of coming to the blood bank to donate. Level of awareness through different electric, electronic, printing media and advices made by different organizations like banners, posters, pamphlets, stickers and different methodologies.

While the literacy rate influence the donation blood, where literacy rate more than 80% in this small district. It has been seen that new and novice donors were TDC (Degree students), Post Graduates who have know about the merits and demerits of whole blood donation, blood components etc. few cases were bargain about blood donation after donation he/she will permanently have ill health.

Presently, various information's, about VBD is also available by whatApp group's application and other digital media to make closer the patient-donor relationship within no time.

Conclusion: The present study was carried out in the Tezpur Medical College and Hospital from Jan2020 to Dec2020 both in house and VBD. The blood bank which is a State-of Art model Blood Bank with all modern instruments and equipments where the facilities of whole blood collection, blood Components Separation (BCSU), including plasma and its derivatives are regularly done. It has seen that the “KAP” material in is great in its own value and merits goes to State AIDS Control organization (ASACS) and State Blood Transfusion Council (ASBTC) for preparing a wonderful knowledge house for voluntary blood collection, donor selection, donor deferrals, testing etc. this blood bank so much benefited and number blood collection both OPD and In house has been increased tremendously from previous 36% to 58% present.

KEYWORDS : Voluntary Blood donation, KAP material, State AIDS Control organization (ASACS) and State Blood Transfusion Council (ASBTC).

INTRODUCTION:

Blood is the only liquid that have to be replaced by a suitable competent and compatible another unit of blood till today. To produce safe and effective supply of blood the pioneering organization has been working round the clock day and night. And thousands and thousands of precious lives are saves each year. Blood can be said to safe and effective when the blood policy makers developed policies throughout the countries as per existing norms and facilities including supply instruments and equipments uneventfully, irrespective of geographic location. This includes the policies like uniform donor selection criteria, collection of safe and new donor requirement process, confidential counseling, donor deferrals, and mandatory tests as to done by existing laws and regulation as medical ethics. This requires the quality of “Good” donor which means “A person 18-65 yrs of age, free from acute illness, may be a novice or regular, repeated, voluntary non remunerated are not influenced by any pressure either by money or muscle who used to donate after a course of awareness programme etc. This means such category of persons bear either zero or no risk which so much important for quality, safety point of view, and this donors are regular and repeater and their services can be utilized as and when necessary basis.

Blood transfusion service (BTS) is an integral component as well as division of state AIDS control organization under state blood transfusion council. (SACS, Assam and ASBTC). This parent department in an umbrella organization for maintenance of regular, safe and effective, quality services throughout the state including the “State of the Art” facilities at the Government Medical Colleges

including blood cell separation unit, district level blood bank at different medium and smaller district with extended services to FRU's.

Although government facilities are limited we tried to find out present knowledge, attitude and practices of this new Tezpur Medical College and nearby areas by interacting towards regular, repeated voluntary blood donation and find out measure to enhanced the capacity each year to formulate and to prepare for the next year.

MATERIALS AND METHODS:

The study was carried out Tezpur Medical College & Hospital, Tezpur, Assam, in our newly setup “State of The Art” facility blood bank and modern Blood cell separation unit and to practical and real knowledge, attitude and practices of voluntary blood donation process.

Short history:

Tezpur literally means “City of Blood”, reminds of the romantic legend of Usha and Anirudha. The legendary kind Bansura who came to understand the secret love and roared who could not control his passion, “The love marriage is not authentic”. When King Banasura learnt of the clandestine romance, he imprisoned Aniruddha, which led to the arrival of Lord Krishna to rescue his grandson from Dwarka to Tezpur, Assam. A fierce battle followed and the entire city was drenched in human blood, hence the name Tezpur, i.e. 'the city of blood'(Govt.of Assam/Library).

In a nutshell about the Tezpur city, as per government data, Tezpur is a town and urban agglomeration in Sonitpur district, Assam state, India.

Tezpur is located on the banks of the river Brahmaputra, 175 kilometres northeast of Guwahati, and is the largest of the north bank towns with a population exceeding 100,000 as per Metropolitan Census, with a population of 1.03 lakhs as 2011 census. Area is about 40km² literacy rate more than 92.3% in Tezpur circle divided into 24 wards. As per 2011 there are 17,808 families residing in the city, out of which 38,740 are males and 36,800 are females thus the average sex ratio of Tezpur is 950.

Type of study: (The application “KAP”)

The study was carried out meticulously, judiciously with few general meeting with the help of deputy commissioner who is also a member of hospital transfusion committee, including leaders of political parties (both ruling and opposition), social, religious leaders and framework and blue print was taken out including Medical College faculties. And the whole group was divided into

- (1) Common local people
- (2) Prominent and social leaders
- (3) Donor organizations (who organizes blood donation camps)

Statistical sampling and the applied methodology:

Huge multivariate sampling methodology was followed to cover various wards, wards was selected again into small clustered zone and then to small groups, using probability proportionate to the sample (PPS) by statistical procedure.

At the very outset, a common bilingual detailed questionnaire was prepared and distributed among them.

The number of the voluntary participants was informed before hand and had to fill up all the necessary information maintaining all possible care and confidentiality and to handed over filled up forms to respective group leaders, than to community leader and finally ward in charge.

The final filled up data's were verified by expert committee members framed by the Hospital Transfusion Committee and thus data were analyzed as statistical expert and finally handed over to the blood bank officials.

The very Basic kernel:

Observing all the necessary infra structure and common knowledge, behavioural pattern, we went on discussing and taking help from various local leaders to take a clear picture of general outlook and pattern of answer including body language of participants:

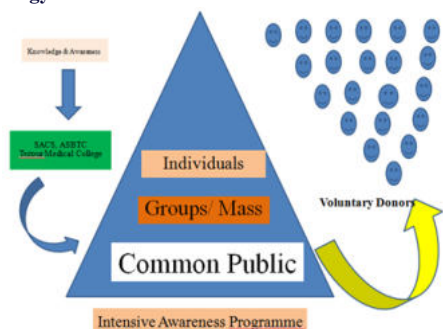
- However, keeping “All is well” type: (The Basic Fundamental/GK)
- : How do you know about voluntary blood donation?
- : What do you know about voluntary blood donation?
- : Why voluntary? Why not paid donation?

Type of communication to individual/ Mass Media etc. / various types of sources etc.

Table: 1, Information source about Voluntary Blood donation

Sl.no	Information source	Percentage
1.	TV and Radio	50
2.	News paper/magazine/advertisements	30
3.	School/College , NCC, NSS Social service wing	15
4	Public workshop/blood donation camp	10
5	Person to person communication	05

Methodology to mobilize Mass:



OBSERVATION AND RESULTS:

After period of long untiring process of computing, the sample size was satisfactory. We could recorded 75% Male volunteers in comparison 25% of the female counterpart which represented by pie diagram.

Another more than 80% males (new beginners/novice) who had ever donated voluntarily as compared 20% of female. This is due to specific socio economic group and population structural pattern.

Knowledge about Voluntary donation:

Public as well as private education system is now beyond circumference and sky is the limit so also with the wide spread and social Infra structure and life style of common people in Tezpur. Education for the poor as well as central government national policies like “**Beti Bachao, Beti Padhao**” Girl child education is the topmost priority in this city. Awareness about different State government as well as central government education policy are available every nooks and corners of the city. Total literacy in Tezpur circle is 81.65%, Male 74.14% while female literacy is 68.64% with 61,635 no family as per govt.record. Population is mixed in nature including Hindu, Muslim, Christians, Sikhs, Buddhist, Jain and other religions.

More than 80% College, (under graduate and post graduate) are aware of voluntary blood donation and remaining 20% are comprises of local general common people, bank official, tea gardens workers, school teachers, post office employee, insurance employee etc.

Why common person don't give blood?

Although general education and life style is rising, few of the people had various social taboos, prejudice, simple fear to see the medical injection and syringe etc.

What is common public source of knowledge?

Present day is a day most sophisticated digital world, people receiving and sending information within in fractional second globally from one corner to another through news papers, TV, mobile phone, electric, electronic and other private as well as public media Voluntary /Replacement/Family donors: Tezpur Medical College Blood Bank Few years' successive (Retrospective) data are almost closer to each other

Table: 2, Present status.

Year	Replacement donors	%	Voluntary Donors	%	Total
2016	205	5.50	3517	94.49	3722
2017	358	8.57	3820	91.43	4178
2018	494	11.96	3638	88.04	4132
2019	411	9.34	3988	90.65	4399
2020	437	10.43	3749	89.56	4186
Total					20,617

Table: 3, Level of Awareness among common public.

Awareness level	Level of education					
	Total (n=1000)	Illiterate	Class-10	Class 11-12	Graduate	Post Graduate
Awareness of voluntary donation	1000	81/100 (81%)	250/270 (92.59%)	175/190 (89.47)	215/240 (89.58%)	175/200 (87.5%)

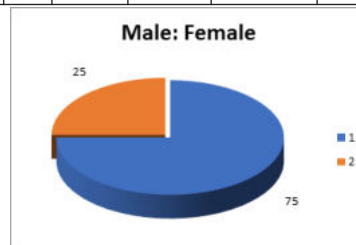


Table: 4 No. of Person examined

Block level selection	Number	Interview per block
No.of Household	20	1 adult
12+ standard /	1	30 students
TDC college	1	30 students
Company/Industry	2	15 employee
Medical College staff	2	5 officials
Health Institutional & Others	2	5

Table: 5, Not donating blood

Sl.no.	Reason	Percentage
1	Lack of awareness	50
2	Feeling weekness	25
3.	Sick	10
4	Donot know use of blood	15
5	Fear to injury & bleeding	10
6.	Physical ailments, DM, high BP etc	

DISCUSSION:

Voluntary blood donation is one the most important tool in present day blood bank practice. If the vital information is ready with the blood bank in due time than any administrative decision can be made with no time, like invitation of voluntary donor from the locality, or from an NGO or any donor organization in special holiday (including National /International), "State Bandh", "Hartal", "Dharna", Road blockade etc. But the KAP is not given priority as it needs to be. Although these type activity looks like an age old procedure, but it's always gold standard and superior. What we are looking for very much sophisticated digital audio-visual aids and advertisement to attract mass communication, many of common people could not understand after the session is over. It came to our knowledge that while giving KAP material and was analyzed and the review at the grass root level. Many of the common public needs close monitoring and seek the help to understand proper utility of knowledge and how to do, what to do etc. to augment District level and State level by concern authority specially ASACS and ASBTC to formulate guide lines locally.

In Tezpur, this Medical college blood bank and BCSU is newly setup, and with few private blood bank which are run by private organization not sufficient enough to run the show. Only this blood bank is working since its inception for cent percent voluntary blood donation following necessary guidelines framed by ASACS and ASBTC. Except certain critical times family/replacement donation is allowed, that is also very scarce. Because, there is routine VBD camps list hanged in the blood bank notice board by counselor beforehand for quarterly/monthly basis where various NGO applied through proper channel and request for camp outside. We have a permanent blood collection van with permanent staff's for this purpose to meet the requirements.

Every year thousands of visitors from different corners of the country used to visit various precious pilgrims like Mahavairab (Lord Shiv) Mandir, Agnigarh, Chitralekha Udyan and many other importance places are occupied by various International Tourists most of times in a calendar year, the best of Tezpur city. During various rituals, pujas there are huge crowd where many casualties used to attend medical college blood bank off and on. Moreover, the North-south national highway which is very big threat during picnic seasons. Air, water and rail connectivity becomes so chaotic during special season of the year.

The present observation (electronic media is the most attractive) of how people gather information about blood donation seems to be in parallel with NACO's recent efforts of using this media for disseminating the information.

In this study gender-wise greater proportion of the blood donors were males (75%) than the female (25%) counterparts. These findings are comparable with the study conducted in Sikkim in 2004 where males were (84.2%) and females (15.8%).

The proportion of voluntary donation (56%) in the present study was lower than the national average of 61%. However these findings are comparable with study conducted in Sikkim in 2004 where voluntary blood donation was 46%.

The present observation of awareness using a high quality "KAP" about blood donation is being directly proportional to the education levels that seems to be logical since education would also increase awareness about all possible knowledge to erase the social stigma, taboo's and other prejudice about voluntary blood donations.

In the present study 32% of the participants did not donate blood because of lack of awareness. This is very similar to the study carried out on 500 Saudi individuals, where eighty-nine non donors (42.6%) replied that they were 'not approached by anybody' for blood donation.

CONCLUSION:

Intensive and extensive working at the grass root level (village,

community, block/ward and district) has proved usual blood donation process from present and existing 18% to resultant 81% using this special "KAP" process and can be enhanced as possible. With present day digital media helps people a lot if we take benefit in the proper way and formulate present and upcoming years to no. voluntary donation though public awareness programme.

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