RUDHIRAMDANA

EVERY DROP COUNTS

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ABSTRACT:

Blood donation and availability of blood at the time of need is always been a serious problem since time immemorable. The shortage of blood or the availability during emergency has caused many life losses throughout the entire planet. In the 21st century technology has wide spread its reach to everyaspect of our daily lives to make it more comfortable by making all the important things required for a healthy living available to our finger tips.

Keeping these problems in mind we have developed our webpage where we provide a direct link between the donor and the receiver. A person who is interested to donate blood can do it at any time without waiting for blood donation camps. A person can check the availability of a particular group of blood just by visiting our webpage and are not required to visit any blood bank. If a particular blood group is not available then the user is also provided with the contact details of the nearby blood banks thus making the process of finding blood during emergency situations very easy resulting in the decrease of life loss due to unavailability of blood.

INTRODUCTION:

The Blood Donation strategy India is very complicated and has no many necessary resources. The main problem, which is destroying the blood banking system, is distribution management. The standards of blood donation vary in every state, city even in centre of the city. Many big hospitals don't have their own blood banks and because of this the private blood banks evolved. There is a huge need of trained health care professionals in this area of transfusion medicine.

In most of the countries of the world, there is a scarcity of blood . For India only in 2016, the Health and Family Welfare reported a donation of 10.9 million units against 12 million required units. This is causing due to a lack of voluntary service which can provide people blood bags whenever they need that. The lockdowns when started due to COVID-19 resulted in shortage of blood across our country. Various other reasons are there for which

this occurred such as lack of social awareness, and people's misconceptions related to blood donation.

This we have to keep in mind that in India if we see reports then we can find that there is a huge demand of blood and it is increasing daily. Therefore, to overcome this we tried to do something for our society which will affect less but this less effort can help some people. Government can arrange huge blood donation camps and from there if they will log in our website then that way we can help much much people in a short period of time. Similarly, NGOs, hospitals can help us to get very huge amount if people.

WHO recommends the following integrated strategy for blood safety and availability for stakeholders, decisionmakers, and partners:

• Establishment of a national blood system with well-organized and coordinated blood transfusion services, effective evidence based and ethical national blood policies, and legislation and regulation, that can provide sufficient and timely supplies of safe blood and blood products to meet the transfusion needs of all patients.

• A collection of blood, plasma, and other blood components from low risk, regular, voluntary unpaid donors through the strengthening of donation systems, and effective donor management, including care and counselling.

• Quality-assured screening of all donated blood for transfusion transmissible infections, including HIV, hepatitis B, hepatitis C and syphilis, confirmatory testing of the results of all donor screen-reactive for infection markers, blood grouping, and compatibility testing, and systems for

processing blood into blood products (blood components for transfusion and plasma derived- medicinal products), as appropriate, to meet health care needs.

We have tried to focus our project on the above knowledge so as to develop an integrated website that solves most of the basic issues that are faced related to blood donation and reception. Our website focuses on all these statements to the highest levels that we could work on. We have concentrated our efforts on the timely supplies of blood, collection from regular unpaid voluntary donors, made efforts in finding out the quality of blood and also the medical conditions of the donor.

The current blood bank storage system is focused on files. This ensures that data and knowledge about blood, donors, and recipients are stored in documents and archives. Data and information processing becomes difficult and time-consuming as a result of this. All tests of blood donation and transfusion are recorded on physical papers as well. This makes information helpless to blunders and human errors which in turn put human lives in peril. Another underlying problem with this framework is destitute productivity. The sheer time-consuming method of recovering blood, be it donor or recipient information takes a lot of effort. The information retrieval being such a time- consuming process makes it very hard for hospitals to save lives at crucial times. Information Security & Information backup is another additional point to consider as the papers and records are effortlessly stolen or misplaced. This makes it an untrustworthy framework. The goal behind our project has been to provide a platform that has all the information regarding blood donation, registered

donors, which may in turn help in providing fast blood delivery. We have put our efforts into researching all about blood management systems and practices and have used the knowledge in making our project the best of what it could be. Every blood donation management system is required to accomplish some basic tasks. It has to have a mechanism for information exchange to be made available for donors, receptors, and other stakeholders. It must also ensure that the information regarding the blood inventory status of different stakeholders such as blood banks, hospitals are made available. It was important for us to find the faults in the existing system so that we can find the solutions to the flaws and implement them in our project.

RELATED STUDIES:

"And who's Savath the life of one; it shall be as if he had saved the life of all mankind" (Al-Quran). The best one among you is that who is most beneficial to others (Prophet Muhammad – P.B.U.H.). The Literature shows that if we collect enough blood and serve those blood to the needy people then this will be more acute in developing countries like India.Many people die due to lack of blood or due to diseases caused while transfusion of blood happen.

This thing occur in rural or remote areas where there is lack of facilities for collecting blood, storing it and processing it. We live in a society where people being selfish is the norm and giving has become a sign on the weak. This is not a lie this the truth of what we

have become but we need to extend our horizons and open our heart. Blood Donor Society, Gomal University, Dera Ismail Khan, made an effort on this and started a mission. The outcome was to help people save their life in faster, better and efficient manner because we know that life is important more than anything. For this purpose, a service named ' Blood Donor Society' was launched in 1994. It is absolutely free of cost. To coincide with the 80th anniversary of blood collection services in Australia, the Federal Government has designated 2009 the Year of the Blood Donor. Notable findings from the 2007 NBCUS and comparisons with the 2005 report were as follows:

• Total WB/RBC collections in 2006 increased from 2004 by 5.8%, to 16.2 million units.

• Total WB/RBC transfusions in the same period increased by 3.3%, to 14.7 million units. To donate blood, find a blood bank or receiver near you. While doing a appointment, ask the following questions:

• What are your general donor requirements?

• Problem of communication

• Problems in the record keeping.

• Frequent errors in keeping records

That is why a method is required which will solve the basic blood requirement problem in more advanced as well as user friendly way and in a cheaper way. Thus, Rudhirumdana was created to provide the user a user-friendly platform to help them to meet their blood requirements during the time of

emergency.

Methodology:

First we was planning to collect information of people by going to them personally but this process is slow and time taking so to do our work fast we planned to build a website for "RUDHIRAMDANA". So, we choose a online platform which is weebly to make our website because in weebly there are powerful tools which make easy to build a professional, mobile optimized site and grow our website with integrated marketing and advanced analytics and it tool less time to build our website completely than building by codes but we have back up plan to build our website by our own code if anything goes wrong in future. Now I will discuss the whole process of our website. First of all when someone will enter in our website then they will land on our home page which will contain all the parts like the link of the volunteer, log in link of the permanent member, request blood everything will be in our home page so no one get confused from where they can log in and request. Now we will discuss 3 major parts of our system.

- Request Blood
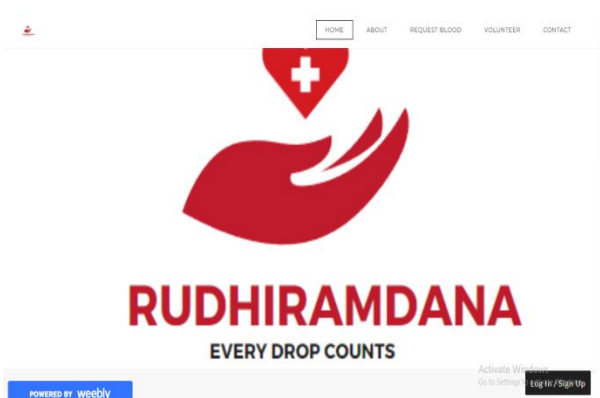- Log in as a permanent member
- Log in as a volunteer

Fig. 1.1

Request Blood:

In this we have a form in which the person who wants blood can fill correct details mentioned in the form like we have the Full name of the patient or the person who is requesting blood then there is address of the patient or the person then blood group, phone number of the person hospital address where the patient is admitted up to here everything is mandatory but the email address is not mandatory. After filling all the details there will be a confirmation message from us that we have received your request and we will contact them as soon as possible.

Log in as a permanent member:

Everyone know that donating blood is a Nobel act so if we get a chance to serve people who are in need of blood whenever someone need in emergency then it will be more Nobel so we have introduced a permanent member space where people will find posts message alerts to give blood to the needy one and if they are unavailable then they can refer someone who can help and someone is not receiving message or not coming to the website then they will get a call to the number provided during the sign up. We have a form open when some will click sign up where they will have to fill their full name, Email , Password of their choice, (Minimum 8 characters), then blood group, lastly state from where they belong. After filling the details they will forwarded to the log in page where they will put their email and password. After log in they will land to a platform where they will find messages and posts where they can reply or they will comment by which we will fetch their information and give their details to the requested person and we will guide them in the whole process through our volunteers of different states.

Log in as a volunteer:

There are some temporary and permanent conditions in which someone cannot donate blood even if they want to give blood. Among the temporary conditions if someone is pregnant, have acute fever, did ear or body piercing and tattooing in a 6 months' time and had surgery they cannot give blood so they can choose this volunteer part. And taking about the permanent conditions we have cancer, cardiac disease, sever ling disease, Hepatitis B and C, HIV infection, AIDS, or STD, High risk occupation(Prostitution), Unexplained weight loss of more than 5kg over 6 months, Chronic alcoholism, or other conditions stated in the medical assessment of blood donors. For this reason we have this section where someone who cannot give blood they can help gets blood for the needy one. If they know someone who can give blood then they can refer them our website and from there they will choose they want to be the permanent member or the volunteer and they can help the permanent members to guide to the hospital where blood is needed. After log in as a volunteer they will find messages related to volunteering only.

This way we can form a community of people who want to give blood to needy one and solve at least some percent of blood scarcity.

CONCLUSION:

Computers are gradually becoming accepted in about every field of life, like business environment, health, industries, and research environment. Within these application areas, online systems appear to have become most suitable for health care and life saving processes. The proposed system is able to manipulate these real facts. These analyses reports show that most of the peoples are unaware of the utility of such activities. In this context seminars and wide publicity is required both in male and female. This system can be extremely useful to patients, doctors and researchers, which may further be extended to research purposes, like:

- Group-Wise Availability of Blood

- Area-wise Availability of a Blood-Group

- Age-wise Availability of Blood

- Age-Wise Requirement of Blood

- Area-Wise Requirement of Blood - Group-Wise Requirement of Blood

- Trend in Blood Donation It may be concluded that this work is not a one-time job and not a website only but is a continuous work to be adopted for further research and the system can be used in various "what-if" scenarios. This work may be extended to interconnect all the blood donors' societies in the country through using LAN technology.
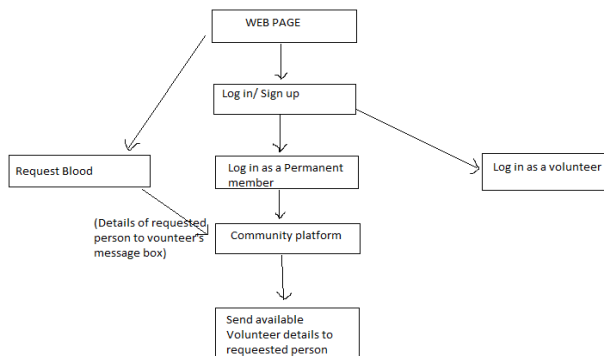
Fig.1.2