Abstract: In the hospital for emergency cases when the blood is needed then management of blood distribution become critical. Sometimes it happens that donors are available but they are not aware about the blood donation camps or systems. So to resolve this efficient communication between hospital, blood bank, donor, and accepter is important. So we come up with a system provide complete solution to the problem. Blood donation is a voluntary activity in the emergency case and provides some critical blood units for transfusions. Donor hemovigilance is the surveillance and identifying steps to improve donor safety. The project presents the history of the donor hemovigilance development and two data mining efforts performed on the data is to be collected improve the safety of blood donation processes. The benefits of this system are create unbreakable blood chain cycle. we will develop a software tool to collect, organize the blood that occur at different participating blood centers and hospitals. Data mining is used to the essential system are shared with the community and classification to help blood the center and hospital managers and quality should be improvement administrators undertake interventions to improve donor safety.

Key-Words: Blood, Data mining, Donor Hemovigilance, Hospitals, Organizations, Safety.

1. Introduction

Blood donation process is a series of interdependent operations in the blood transfusion organization that consists the of donor registration, donors’ health care evaluation, paints/donors whole information, blood collection , blood screening, supply when blood needed, and index management, and proper concenement of blood[3]. Nowadays information & computer technology has accepting more importance in the medicine and health care areas, as it the needed to make it efficient by using computer and Information Technology (CIT) to database systems. Blood is a very always in the great high demand from the past, but nowadays as the population increase the ratio of road accidents, medical surgeries are also growing in same amount. The blood and there donors are very much important as it cannot be manufactured and only come from generous donors. This gives us the importance of looking for blood and providing conditions for donating blood [1]. Blood donation and its transfusion service is an rights part of medicine and health care sectors [2]. As the medical information and Health care sectors repositories data is complex in the computer technology [3] it explores the use of data mining field. For gaining useful and important information of large health related data from large amount of blood banks to give proper and timely delivery of blood data mining is very much important field. The volume of data in the blood donation is much large, raw dataset are not applicable for mining it. It is necessary to analyze them and convert it into useful information or knowledge.

2. Literature Survey

There is no substitute for blood and the increasing demand and decreasing supply has put many patients and we also seen the near about 5 lack people are loss their life in 1 year because of unavailability of blood on time. Blood donation is important activity in the emergency cases. Many hospitals throughout the many are struggling to keep a sufficient supply of whole blood and blood products on hand.

Table 1: Literature Survey

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<thead>
<tr>
<th>Sr. No</th>
<th>Year</th>
<th>Author</th>
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<td>1.</td>
<td>2010</td>
<td>Esmagirts, M., Rameshkumar, S. Wu, C. and Mayer, R. J.</td>
<td>&quot;Aisin Terasu Data mining Using Environment, Epidemiology, and Biology Surveillance and Analysis Tools: A Case Study.&quot;</td>
<td>This paper is limited for knowledge about Data mining and creates the analysis of reaction.</td>
</tr>
<tr>
<td>2.</td>
<td>2011</td>
<td>Widing, Werner, France, Christopher R., Dijk, Nynke van, Kusel, Hans- Thilo, Roble D., and Tonomizo, Peter</td>
<td>&quot;Physiologic strategies to prevent fatalning complications during or after whole blood donation.&quot;</td>
<td>Dietary replacement of salt lost with blood donation that has not been applied in transfusion medicine previously but which has the potential to reduce risk.</td>
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<td>3.</td>
<td>2011</td>
<td>Esmagirts, M., Cupal, B., Rameshkumar, S., Mayer, R. J.</td>
<td>&quot;Reference of Missing Patient Using Next Mining and Nearest Neighbor Techniques.&quot;</td>
<td>This paper is limited for knowledge about Missing ICDD orders using Test mining.</td>
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3. Proposed System

The architecture of proposed system is it display in figure 1. In this system hospitals and blood banks are connected to each other via network. In this system blood bank organize the
blood donation camp and collect the blood from peoples and provide the blood to the hospital. In that we are making little automation that is creating new software tool which will check the blood storage level and send the notification that the hospitals and blood banks if the blood storage is below 30%.

Figure 1: Architecture of Proposed System

4. Conclusion

In this way the overall architecture of blood donation system is presented. This system differs from existing system web base system. So this system beneficial for blood donors, patients, hospital administrator etc.

5. Acknowledgements

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6. References


[4] Kamel, Hany; Tomaszulo, Peter; Bravo, Marjorie; Wilibank, Thomas; Cusick, Robin; James, R. C; and Custer, Brian. “Delayed adverse reactions to blood donation,” TRANSFUSION, Volume 50, 556-565.