LITERATURE SURVEY

The Various Methodologies that are used for the Plasma Donor Application are discussed as follows:

Pohandulkar & Khandelwal [1] (2018) considered a Blood bank application using raspberry pi, to bring near-by blood banks and the person who needs the blood due to accident or any emergency. The main aim of this work is to reduce the time span between the donor and recipient. By using Raspberry pi 2 and GSM modem SIM900A, all the databases from blood banks are collected and fetch the given data as per request from the recipient. The fetched blood donor data is sent to the recipient and also with addition an IP Address is attached to the message which allows the recipient to download an app and get all the information.

Vanitha & Divyarani [2] (2013) proposed an idea performing communication between the blood centre department and hospitals using Geo-location RVD Scoring Algorithm. Also makes it easy to organise the database including the contact details and blood groups of the donors..

Ankit Bhardwaj et al. [3] (1978) focused on data mining and the current trends associated with it. It presents an overview of the data mining system and clarifies how data mining and knowledge discovery in databases are related both to each other and to related fields. Data Mining is a technology used to describe knowledge discovery and to search for significant relationships such as patterns, association and changes among variables in databases. This enables users to search,

collect and donate blood to the patients who are waiting for the last drop of the blood and are near death.

Catassi & Petersen [4] (1967) described a computerised inventory control system for controlling blood distribution between the blood bank and its client hospitals. Significantly, appropriately processed information of daily blood status by a centralised computer has led to a 60 per cent reduction in out-dating together with an inventory reduction at the blood bank averaging 30 per cent. Incorporation of the new system into current hospital and blood bank management is evaluated in terms of psychological, labour, and economic implications.

Abd-Alsabour et al. [5] (2017) aimed to help citizens fulfil their needs for a safe and reliable blood group by searching for and locating a specific blood group. The author illustrates the problem of the blood bags shortage which is represented in the uncontrolled blood banks and parallel markets, lack of awareness and confidence, disappearance of the rare blood groups, and the difficulty in finding a specific blood group. Hence, the Blood Bag web-based application that is proposed by the author connected to a centralised database to gather and organise the data from all blood banks and blood donation campaigns. The proposed application organises and controls the whole critical processes related to blood donation, testing and storage of blood bags, and delivering it to the patient.

Seraphim et al. [6] (2022) proposed an idea to detect the problems in the whole process of blood donation. The key problems reported for not donating blood were that donating blood did not cross their mind (32.4%) followed up with 'No time available in schedule for donation

which added up to around 45%. Finally, the main reason being the difficulty in accessing the blood donation centre which encompasses 61.3%. This is due to unawareness in the society regarding the blood donation process. Sound data-driven machine learning techniques are used for predicting donations and supply needs which in turn can improve the entire supply chain.

Tyagi et al. [7] (2021) depicted a high level program to close the hole between blood givers and individuals needing blood. The Online Blood donation Administration Framework application is an approach to synchronise blood donation centres with emergency clinics with the assistance of the Web. It is a web application where enlisted clinics can check the accessibility of the necessary Blood and can send a blood solicitation to the closest blood donation centre or comparable contributor as per the blood and can be controlled online through where fundamental. Blood donation centres can likewise send a solicitation to another blood donation centre that isn't accessible. Anybody willing to give blood can be found at the closest blood donation centre utilising the Android Bank The executives Framework. Blood donation centres can be followed utilising maps. The Android application is simply accessible to benefactors to look for blood gifts and ask blood donation centres and clinics to search out blood donation centres and close by givers.

Hegedus et al. [8] (2019) described to subserve and popularise blood donation, respectively to support an effective and permanently extant communication channel between the project's two target audience. One of the target audiences contains persons who are willing to donate blood. For them, the system provides a mobile application for logging and scheduling their donations, for receiving notifications and for

accessing useful information related to the blood donation process. The other target audience includes employees working at blood donation centres. Using the web application, they are able to manage the informative data published through the mobile application, and they are able to send notifications about the current blood necessities.

Debnath et al. [9] (2018) described that an automated system could be built to monitor and organise blood donation camps. The author developed an integrated framework with all related but isolated web based subsystems of a blood management system. They propose a data warehouse (DW) as an integral part of the integrated framework to store historical blood donation data in a centralised database for analytical processing.

Patil and Ghuse et al. [10] (2015) collects and analyses the reactions that occur in the donor during blood donation at different hospitals and blood banks by the DonorHART tool. The tool also monitors and researches the risks involved for donors at the time of blood donation or after the donation process. Data mining makes an effort to reveal the patterns in data that are difficult to detect and recognize with automatic pattern recognition. It is analysing data and then summarising it into different forms which is called as information and is taken from different databases.

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