Implementation of the K-Nearest Neighbor Method to determine the Nutritional Status of Toddlers

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ABSTRACT

Posyandu Kemuning 5 is one of the health services provided by, from, and for the community in Ngilon Hamlet, Bangunrejo Lor Village, Pitu District, Ngawi Regency. Posyandu Kemuning 5 conducts its activities once a month on the first week of the month. One of the activities of Posyandu Kemuning 5 is Maternal and Child Health. Posyandu activities related to children are weighing. The function of weighing is to monitor nutritional status and detect as early as possible if there is a problem with the child's growth. The problem that occurs in Posyandu Kemuning 5 is that the weighing alone does not specifically indicate whether the toddler is classified as poor nutrition, undernourished, well nourished, at risk of overnutrition, overnutrition, or obesity. The problem will be solved by building a system for determining the nutritional status of children under five with the KNN (K-Nearest Neighbor) method which can assist posyandu officers and parents in knowing the nutritional status of toddlers quickly and accurately. The system for determining the nutritional status of toddlers using the KNN (K-Nearest Neighbor) method is a website-based system using the PHP Hypertext Processor (PHP) programming language. The design model of this system design uses Entity Relationship Diagram (ERD) and Data Flow Diagram (DFD). The system for determining the nutritional status of children under five using the KNN (K-Nearest Neighbor) method has generally been able to solve the problem. This system can assist posyandu officers and parents in knowing the nutritional status of toddlers quickly and accurately.

Keywords: K-NN (K-Nearest Neighbor) method, Toddler Nutritional Status