ABSTRACT

Abstract: Stunting is a growth disorder that occurs in early childhood. This condition occurs because the child has a chronic nutritional problem which triggers the child to have a height below normal. The indicator used as a standard for whether a child is stunted or not is height for age. If a child has a z-score value less than -2 standard deviations, then the child is said to suffer from stunting. Poor nutritional intake is one of the factors causing children to suffer from stunting. Most Indonesian people think that the genetics of both parents causes children to be shorter than their age, but genetics is a minimal factor that causes stunting. In 2020, Indonesia ranks second in the prevalence of stunting in Southeast Asia, according to the Asian Development Bank (ADB) report. Based on the results of the Indonesian Nutritional Status Survey (SSGI) in 2021, the stunting prevalence rate in Indonesia 2021 is 24.4%, but in 2022, the stunting prevalence rate will drop to 21.6%. One way to treat stunting in children is by providing daily nutritional intake according to the child's condition. In this study, we used the Telegram chatbot with an ontology and the rules Semantic Web Rule Language as a knowledge base. The accuracy performance of our system is 93.3% which shows that our system can provide nutritional recommendations for stunting patients.

Keywords: Stunting disease, Ontology, Semantic Web Rule Language, Nutritional intake, recommender system