

Review and Analysis of Risk Factor of Maternal Health in Remote Area using the Internet of Things (IoT)

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Abstract:

IoT is the greatest ingenious innovation in the modern era, which can exploit also in mission-critical like the healthcare industry. This paper demonstrates effective monitoring of pregnant women mostly in a rural area of a developing country, with the help of wearable sensing enabled technology, which also notifies the pregnant women and her family about the health conditions. There are many researchers have been researched to reduce the maternal and fetal mortality but the mortality rate is not reducing, where it should be in zero tolerance. This research intended to use machine learning algorithms for discovering the risk level on the basis of risk factors in pregnancy. In this research, an existing dataset (Pima-Indian-diabetes dataset) has been used for the analysis of risk factor and comparison of some machine learning algorithm shows that Logistic Model Tree (LMT) gives the highest accuracy in case of classification and prediction of the risk level. Regardless, few selected pregnant women's data has been collected (through IoT enabled devices) and the same process also applied for this dataset also by using LMT. Comparison results show that the prediction of risks is the same for the existing and real dataset.

Keywords : Maternal Risk Factors; Internet of Things; Wearable Sensors.

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