

## ABSTRACT

In rural areas, baby and maternal mortality rates are greater because the majority of pregnant women may not be able to get their routine exams at the beginning of pregnancy. The society is dealing with serious medical problems as a result of these problems. The current approach involves an ultrasound sweep of the expectant women, along with certain basic indicators being calculated and handled by Bluetooth technology. The expense of the ultrasound scan is a drawback of the current system. A wearable, non-transmitting system that can track foetal movements over an extended period of time would be very helpful for establishing typical movement levels in the general population as well as for monitoring the health of particular foetuses. This is addressed by making the accelerometer sensor wireless in the proposed work. It is primarily used to assess the movement of the foetus, while other crucial parameters like the woman's pulse rate, and movements are measured using other sensors. The proposed effort focuses on creating a small assist device for pregnant women in remote areas so they may access the foetus and mother's vital signs for a low cost using modern sensors for individualised care. These results show the potential of multimodal sensing for the creation of a low-cost, non-transmitting wearable foetal movement monitor.

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