**An Inventive Remote Health Monitoring System for Rural Maternal Women Using Wearable Health Devices**

**ABSTRACT:**

**Subject: Rural Health During Prenatal Period**

**Brief Description:**

India contributes to 15 per cent of the global maternal death toll. About 44, 000 Indian women die each year due to complications arising during childbirth. Over 80 per cent of maternal deaths in India are due to six medical causes, including haemorrhage, eclampsia, obstructed labour, sepsis, unsafe abortion and pre-existing conditions, such as anaemia and malaria.

About 70 per cent of these can be prevented with regular monitoring of health during the maternity. During pregnancy, a pregnant woman is prone to Hypertension which increases the risk of health complications. In urban areas, this is prevented by attending the regular prenatal appointments so that the doctor can monitor the blood pressure closely unlike the rural areas, where the women don’t have proper access to the hospitals as they have to commute long distances due to very few availability of gynaecologists in their surroundings. It’s also difficult for a pregnant woman in the rural area to commute to the hospitals on a regular basis as many villages don’t have proper transport facilities and travelling regularly through public transport may affect their health especially in the third trimester.

**Why It is required?**

To overcome such problems that are being faced by pregnant women in the rural areas, we are using fit bands which is a wrist band which senses the heart rate and blood pressure of the patient. The data collected from this device is stored in an application which can be monitored by the hospital which requires continuous monitoring of these data which is normally monitored by a medical transcriptionist (intermediate). The transcriptionist will keep the doctor informed in case of an emergency and will take necessary actions to enhance the patient’s health during their maternity period. By doing this the pregnant women don’t have to travel long distances and everything could be monitored while they are at their homes.

**Final impact in the village:**

To decrease the mortality rate among pregnant mothers and the infants.