

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Gnana Sangama, Belgaum – 590002, Karnataka



A

PROJECT REPORT ON

“Smart Wearable Assistant and Reminder Employing Telemedicine for Pregnant Woman”

Carried out

By

AKSHATHA.S	: 1KS09EC006
ANITHA.H.V	: 1KS09EC008
HARINI SHREEDHAR	: 1KS09EC038
MADHUMANOHARLN	: 1KS09EC049

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Under the guidance of

Mr. SIDDESH G.K

Assistant Professor

Department of Electronics and Communication



K S INSTITUTE OF TECHNOLOGY

**# 14, Raghuvanahalli, Kanakapura Main Road,
Bangalore – 560062**

ABSTRACT

Past ten years have witnessed a rapid growth in the field of technology support and innovations in the field of Health Care Systems. With the advancement of the health care system people can be treated by the doctors in any part of the world. One of the most useful innovation and commonly used in health care system is Tele-Medicine. Telemedicine is defined as the delivery and sharing of medical information of patient over a distance using telecommunication. Using the telemedicine system distance barrier between the curer (doctor) and the cured (Patient) is reduced.

Existing telemedicine systems only exchange the information in real time with fixed to a limited location or pre configured location with mandatory doctor present at other location. Using the portable devices, the telemedicine service is feasible even on the move.

Pregnancy is the fertilization and development of one or more offspring, known as an embryo or fetus, in a woman's uterus. In a pregnancy, there can be multiple gestations, as in the case of twins or triplets. Childbirth usually occurs about 38 weeks after conception; in women who have a menstrual cycle length of four weeks, this is approximately 40 weeks from the start of the last normal menstrual period (LNMP).

A mother during and towards full term pregnancy faces many problems, we wish to outline these problems and through this project we try to suggest some remedies for the same.

1. Important messages from the doctor
2. Reminders about the exercise timings
3. Reminders about the medicines
4. Informing when to start moving to hospital
5. Any distress to be informed to the nearby people.
6. Automatic ambulance to be called in case of emergency
7. Automatic SMS to be sent with location in case of emergencies.
8. Measuring the temperature of the mother.
9. Fall detection in case of a slip.
10. Mapping the where about of the user on the map with relevant details.

We propose a wearable mechanism on the arm which will be held by Velcro belts and will always be monitoring the state of mother. The reminders about the medicines, automatic ambulance to be called in case of emergency, automatic SMS to be sent with location in case of emergencies and other useful information are provided for the doctor or the guardian of the pregnant woman.