**Chapter 5**

**Results and Conclusion**

* 1. **Results**

As we mentioned in our aim of this project, our device takes medicine time and actual time from Bluetooth module and then real time clock starts. When the medicine time is reached then a buzzer is activated for 1 minute to alert the elder person to take medicine. The buzzer is activated again after 15 minutes to remind the elder person. On failure to take medicine within 15 minutes the care taker is alerted by sending a miss call.

* 1. **Application**
* This device can be helpful to a family with elders who are alone the whole day, to remind them to take medicine on time.
* This can also be useful to person who have tendency to forget small things like taking medicine on time.
* This can also be used in hospitals where there are too many patients and care takers are less.
  1. **Limitation**

The device is designed to rule out maximum problems associated with it yet there are some limitations to it. Below mentioned are the limitations:

* The device needs a good cellular network since it has a GSM Module with sim card in it.
* The battery connected to it must be checked regularly since it may discharge itself when kept idle.
* While the data of medicine is to be entered the person, who is entering the data must be near the dispenser since it has Bluetooth module to receive data.
  1. **Scope of Improvement and Modification Possibilities**

The data reception from Bluetooth module can be substituted by data reception from GSM module so that medicine time can be entered from remote location also. A battery charger can be connected so that the regular check on battery can be avoided. The number of slots can be increased so that the person who needs to take medicine more frequently is also considered.

* 1. **Conclusion**

In accordance to the name “Smart Medicine Dispenser” this dispenser unit reminds person to take medicines on time and dispenses medicine into the hands of person. On failure to take medicine the care taker is alerted with a miss call.

During the testing phase we learned how to test a component at software and hardware level. During the testing of GSM module, we learned how to troubleshoot hardware level problem. We also learned the problems that may occur while loading a program into controller and then how to find the way out to it. We also learned how to connect all the standalone components together to achieve a particular aim.

On completion of the project we can say that this dispenser unit can be extremely helpful to old age people and to them who are alone at home the whole day and tend to forget to take medicine on time.