A NOVEL APPROACH ON CEILING FAN BASED SYSTEM TO AVOID SUICIDE BY HANGING

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ABSTRACT:
Suicide by hanging is very alarming in India. As per report of National Crime Records Bureau (NCRB), Government of India, quite good number of hanging cases is reported every year. Most of the hanging cases are commonly suicidal. Homicidal case subsequently creating a scene of hanging is extremely rare. In order to distinguish between suicidal/homicidal hangings, the examination of crime scene on various key points in undisturbed condition followed by autopsy study is necessary to discover the real fact. The objective of this study was to focus on various factors associated with suicide by hanging at India with a view to identify the areas of intervention. In order to overcome these problem the main objective of the project is to reduce the suicide attempts occurring through ceiling fan.

INTRODUCTION:
Suicide is a major socioeconomic and public health issue worldwide. Hanging is one of the 10 leading causes of death in the world accounting more than a million deaths annually. In India, hanging is second common method of committing suicide after poisoning. Over the past 30 years the incidence of suicide by hanging is on increase, especially among young adults. The fact that 71% of suicides in India are by persons below the age of 44 years imposes a huge social, emotional and economic burden on our society. Its prevention is still a challenging job for public health authorities. A detailed knowledge of various factors associated with suicidal hanging in that particular geographical area is very much necessary to prevent such suicides. Keeping this in mind we conducted a prospective study at India, to focus on the various factors associated with suicidal hanging; with a view to identify the areas of intervention.

In order to overcome these problem the main objective of the project is to reduce the suicide attempts occurring through ceiling fan. The proposed project design consists of ceiling fan with hardware components of RENESAS microcontroller, PIR and Force sensor, Buzzer, GSM module, switch and DC motor. And software used are Cube suite+ and RENESAS flash programmer.
Whenever the person tries to hang the force sensor senses the set weight, if it’s more than the set point weight, the beam gets elongated and comes down. In addition to these the alarm is sounded and GSM sends the message to the particular guardians. Provided with the help of algorithm the speed and movement of the beam is monitored.

OBJECTIVES:
1. To prevent the suicide of a person hanging to the fan.
2. To focus on various factors associated with suicide by hanging in India with a view to identify the area of intervention.
3. For Energy conservation and system scalability.
METHODOLOGY:

Figure 1: Block diagram of a novel approach on ceiling fan based system to avoid suicide by hanging

RESULTS AND DISCUSSION:

Figure 2: Photograph of a Ceiling Fan Based System to Avoid Suicide by hanging system prototype.

Figure 3: Images showing the Initialization of the system with display of project title name.
CONCLUSIONS:

The prototype model is designed using structured modeling and is able to provide the desired results. It can be successfully implemented as a Real Time system with certain modifications. Science is discovering or creating major breakthrough in various fields, and hence technology keeps changing from time to time. Going further, most of the units can be fabricated on a single along with microcontroller thus making the system compact thereby making the existing system more effective. To make the system applicable for real time purposes components with greater range needs to be implemented.