THIS IS THE AMAZING SIMPLE WAY JAPAN IS REDUCING SUICIDE RATES AT RAILWAY STATIONS.

MR. PIYUSHKUMAR VASUDEVBHAI UPADHYAY.

ASSOCIATE PROFESSOR – CHEMISTRY DEPARTMENT.

SHRI R.P.ARTS, K.B.COMMERCE AND SMT.B.C.J.SCIENCE COLLEGE.KHAMBHAT, GUJARAT,INDIA.

Abstract:

Railway and metro suicides constitute a major problem in many parts of the world. Japan has experienced an increase in the number of suicides by persons diving in front of an oncoming train in the last several years. Some major railway operators in Japan have begun installing blue-light emitting diode (LED) lamps on railway platforms and at railway crossing as a method of determining suicide, which is less costly than installing platform screen doors. However effectiveness of the blue lights in this regard has not yet been proven. This study evaluates the effect of blue lights on the number of suicides at 71 train stations by using panel data between 2000 and 2010 from a railway company in a metropolitan area of Japan. As blue lights are easier and less expensive to install than platform screen doors. One leading idea is that blue light encourages calmness and positivity. It's a stark contrast to the red, orange, and a yellow of typical streetlights and some believe blue has a positive effect on people's mindsets.

Keywords:- Blue light, Calming effect, Death ratio, Deterrent, Installation, Passengers, Platforms, Railway crossing, Suicidal behaviour.

INTRODUCTION:-

Some companies, including a Japanese train company, use blue lights for a soothing effect and to reduce suicides at specific locations. A 2013 study showed that suicides decrease by around 84% after installing the blue lights. The older study explains that the blue lights provides what's called a "nudge" technique, which is a way of subtly influencing behaviour. In this scenario, the goal is to influence and prevent someone from jumping in front of a moving train. The theory is that if someone encounters blue lights, it will nudge them towards a more positive mindset and stop them from doing anything dangerous.

Since then, other companies worldwide have tried switching to blue lights to see if they receive the same results. In Britain, blue lights have been installed at a Scotland train crossing and an airport train station. The goal is to prevent suicide and crime, and responses have been favourable. There is mixed evidence of the effectiveness of blue lighting to reduce suicidal ideation in the railroad environment. A 2014 study reported an 84% reduction in the number of suicides at stations where blue lights were installed. However, a subsequent study reporting the same data found that these numbers may be exaggerated because only 14% of the suicide incidents occur where the blue lighting would have an impact (e.g. at night on station platforms).

There are signs of hope, with overall number of suicides falling since 2003, when 34500 suicides were reported, down to 21000 in 2017, a reduction of almost 40%. However, the number has been rising among young people, which shows there is still a great need to look at a range of solution that will combat a tremendously sad loss of life. Japan has one of the highest suicide rates and often, these taking their own lives do so by leaping from station platforms into the path of oncoming trains, with Japan averaging one such instance each day. It is a brutal, disruptive end that can also wreak havoc across the transit system. Standing at either end of a platform in Tokyo's labyrinthine shinjuka station, one might detect a small square LED panel emitting a pleasant, deep-blue glow-nestled among vending machines and safety posters, the panel might be dismissed bug zapper. But this simple blue panels are designed to save lives. Operating on the theory that exposure to blue light has a calming effect on one's mood, rail stations in Japan began installing these LED panels as a suicide-prevention measure in 2009. They are strategically located at the ends of each platform-typically the most-isolated and least trafficked area, and accordingly, the point from which most platform jumps occur. Some stations, such as Shinkoiwa station in Tokyo, bolster their LED regime with coloured roof panels, allowing blue-tinted sunlight to filter down to platforms. The reasons behind the change in the number of suicides and crime was pinned down to many aspects, more or less all related to the psychology of people. First, the change in colour was unusual and so, it made people warier. Second, the colour blue is associated to the presence of police and hence, it discouraged any unlawful activity. Third, the colour blue is associated to calmness and is more pleasant than the colours red, orange or yellow.

Methods and materials:-

This study evaluates the effect of blue lights on the numbers of suicides at 71 train stations by using panel data between 2000 to 2010 from a railway company in a metropolitan area of Japan. Scientists use a regression model and compare the number of suicides before and after and with or without intervention by the blue light. The blue light seen from the roof is part of a measurement system that monitors the amount of wear on the overhead line created by train pantographs sliding along the underside of the contact wire. Central railway has installed a blue light visual indicator just above the entrance of the coach for guiding the commuters not to board the running train, at the last moment. The indicator flashes when to stop boarding the train before it becomes unsafe and draws a boundary on the platform which is the minimum clearance level for commuters to avoid accidents while the train is in motion. The device will definitely act as a psychological barrier from boarding the moving train and also as a deterrent to the people. In India, the work of installing the blue light visual indicator was carried out in Kurla carshed of central railway under the guidance of D.K.Sharma, General manager, Central Railway.

Central railway would monitor the performance of new blue light visual indicator and based on the outcome and commuter feedback, a decision would be taken on the installation of visual indicators on more coaches and rakes of Mumbai suburban locals. Blue lighting is already installed at more than 25 long Island rail road stations. The traffic is also expected to roll out at Metro-North and subway stations later this year, concentrating on the most impacted areas. For example, perhaps the installation of new, bright lights-regardless of colour caused people to become more self –aware, thus

changing their behaviour, suggests Ueda, and may be after time the blue lights should they be effective at preventing suicide, will fail because people will grow accustomed to them. Our finding do not imply that the blue lights are always effective for preventing railway suicide. They are expected to stop people at train platforms from jumping in front of trains at night, not during the daytime. In fact, as suggested by Ichikawa, suicide attempts at station platforms during the night time accounts for only 14% of all railway suicide attempts. Thus, the installation of blue lights may contribute to suicide reduction but it is not necessary be the ultimate solution to the problem. There is need to develop additional strategies to prevent suicide during the daytime and unintentional accidents. The installation of the blue light has been shown to reduce the frequency of crashes when the travelling public understands that the presence of the blue light allows enforcement to take place from a distance, where the officer may not be seen. The understanding is that the presence of, and public awareness of the blue lights contributes to the reduction of red-light violations and crashes. This programme prioritizes safety at intersections for all modes of transportations as well as law enforcement offices. The blue lights are not cameras and do not take pictures or video.

Results and discussions:-

Blue railway platform lights may be seem weird at first, but there is a good reason for installing them. Some experts believe that the calming effects of blue lights can help relax and calm people, potentially reducing suicide and crime rates. Blue lights were introduced to train station platform and railway crossing for a similar reason, they are expected to calm people who are agitated. When a suicide happens the train has to be taken out of service and station closed while the emergency staff start a clearing up operation. This undoubtedly causes disruption for both passengers and staff. The cost of each suicide also has a massive financial impact on the service costing over $125000 every time. In, 2000-2013 Japan Tokyo metro started an experiment using blue lights, whilst there was no science to explain this concept there were claims of an 84% reduction in the suicide rate. They concentrated on the hot spot at first with interesting results.

There is a blue light at the end of the train platform, and it has only one purpose: To stop people jumping in front of oncoming train and killing themselves. First installed on Tokyo's Yamanote train line in 2009, these blue LED lights are one example of Tokyo's idiosyncratic response to the city's suicide rate –a rate that is declining, but still one of the highest in the World. Suicide is the bigger threat to Tokyo's citizens than natural disasters and traffic facilities combined. In 2016 a total 3150 people killed themselves in Tokyo. In Kangawa, part of Tokyo,s suburban sprawl, a further 1752 people commited suicide according to data released by the National Police Agency (NPA). Japan saw 36194 suicide in total 2016. After analysis to years worth of data on suicide at 71 Japanese train stations, Ueda and her colleagues found that there was some evidence of an effect on passengers.

They saw an 84% reduction, a figure that was soon widely reported, Masao Ichikawa at the University of Tsukuba took another look at the data. He pointed out that it was important to distinguish between data collected during the day and night at outdoor train stations. During the day, light may be easily missed, or even turned off. Ichikawa noticed that the confidence in Ueda's paper was extremely wide: 14-97%, “statistically very unstable” , he says. This means the actual effect could have been as low as a 14%

reduction – still a significant change, but not nearly as big as big the media coverage had suggested. The overall number of suicide has fallen in recent years, down to about 21000 in 2017 from 34500 in 2003, but the number has been rising in among young people. Blue light may have an effect on people contemplating suicide but, to date science actually gives some what inconclusive results. As Ueda her self says, "I really do not want people to think that blue lights are the solution".

Conclusion:-

To reduce the chance for the passengers to jump the track to commit suicide. People tend to calm down when watching some blue objects. The blue lights help them to think again. "Am I really need to do this?". and they will stop jumping the track. This is a "nudge" to calm them down. According to statistics, passengers who jumped the track at the station which the blue lights are placed is dropped by 84%. Blue light have a calming effect on people, who are disturbed and the suicidal tendency will be lessened as the Japanese are deadly workaholics, are constantly under stress, and the increasing suicidal attempts by jumping in front of trains were alarming, the study showed that the blue colour will have a calming effect for those who are under stress, it was introduced in the train stations and results were really encouraging and drastically reduced the attempts of suicides.

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