MEDICAL INDUSTRY A SYSTEM APPROACH

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Abstract:-

Due to the present current scenario in world a person are affected in large numbers due to corona virus and requires attention of the Government to save life of all by providing means to help patients for carrying in hospital after bringing by ambulance to hospitals. In ventilators pneumatic means to deliver air system is attached, microprocessor in intensive care units. Helps to provide artificial means due to breathing problems, sensor based computer, mask provide, mechanical controller cylinder where gas mixes. Depending on ventilators required to patient are manufactured. Basically all the items are arranged in such a way on ventilator that the patient should not get any life risk, as it found that during emergency the numbers of ventilators are not available and in the present current scenario the patients are not even got ventilators for proper care of health. Cost effective ventilators can help every patient in world to save life of all as time of movement from transport to bed to be managed in such a way the patient life can be saved.

Key Words:- Ventilators, Sensor, Mechanical controller, Virus

Introduction:-Corona virus came due to wrong testing on animals at lab as per the information received in various news agencies. Normally medicines are made after having different trial on various animals, and then humans then further testing done by medical agencies of different countries by their own way as per the facilities available with them. After trial three to four times and even five times the medicine is brought in the market once it's approved by the government regulatory board. As at present vaccines are under trial due to covid 19 effect in India and abroad like Harvard university, Pfizer like different companies and still testing is going on and the results are awaited which shows the seriousness of the virus. Due to the effect of covid 19 in world many lakhs of persons died in various countries like china, America, Russia, India in various states. Every country is having different testing facilities in which USA is number one as per the reports in various media channels. Due to this virus most of the industries are effected economically and their business are closed and many number of persons have lost their job as the industries were afraid that if anyone is effected in industry it may affect all therefore everyone is searching for the options to run their business smoothly without effecting the business. The industries which are badly affected are Tourism industry, Transport industry, Education industry, Malls, Metro service, Flights movement, Train movement from one state to other and local services. Means the total supply chain management is effected badly. At present peoples are not willing to purchase anything like houses & builders all construction companies are effected as one side the labors have left the job of construction to save from corona virus other side all the suppliers of raw material are not in position to supply due to scarcity of materials as the production is totally effected in industries with various reasons and the construction of houses are stopped and other side the houses which are ready for possession the peoples are not willing to take due to the fear in mind of corona virus. The builders those have invested in their projects by taking loans from bank are not in position to repay their initial and interest amount to the bankers and the bankers by not receiving money back from customers they are badly effected in their services and the interest rates of saving is reduced which is effecting the general public who is having only the option to save money by getting interest and in fixed deposits, this is really effecting the senior citizens those have invested their total earning of life either in public provident fund or fixed deposits and the government has reduced the rates because the money was in the hands of banks and the banks run as per the direction of rules made by government and the customers those have deposited their hard money have no option. Even in food processing industry virus has affected a lot as the vegetables and fruits are purchased from market subji mandi of various places where the vegetables comes from farmers growers of particular vegetable in trucks or other means and not safe due to more number of handling persons involved and may carry virus, due to this reason more focus is given on washing of fruits and vegetable and only after testing the vegetables are used in production process. At present due to government initiatives peoples are following various rules like using mask, social distancing, not moving in gathering, wash hands regularly like many number of precautionary measures are taken. The doctors are using specially made gowns in hospitals which is fully covered while checking patients and for movement inside hospitals. Question here is the production of gowns is lesser then requirement and

even no one thought that such kind of virus will come and affect the entire world. Government has taken various initiative like shut down shops education sectors ,offices, industries and everyone is using on line services, but lot of changes are required to save the economy and life of human beings. Each and every issue is studied in detail in this paper of research.

Problems Focus:-Objective is to short out all issues effecting human life by using technology available and creating technology to achieve goal on under mentioned issues.

1-*How to save life of human being from virus.*

2-*What alternatives to be used with technological development.*

3-*How the more focus to be given on manufacture of medicines by various testing facilities.*

4-*How to save economy by creating various options.*

5-*How to control pollution which is also the part of virus and human health.*

6-*How supply chain management can help to short out issues.*

Case study:-*For the purpose of study as the part of research the study done on tourism industry &Medical industry, in both the industry the huge problem occurred due to the effect of corona virus, in medical industry the problems associated with hospitals not having facilities as per the requirement like proper space of movement and testing facilities required for testing virus, gowns required to save the life persons effected by virus, ventilators required for immediate movement of patient in hospital, for this purpose ventilators are manufactured keeping in mind to attach all the accessories to save the life of patient like oxygen gas cylinders with breath control equipment, proper size of stature ,lifting of patient on stature by mechanical arrangement, proper wheel size and lifting at desired size to move from ventilators to hospital beds. Doctor's gowns are manufactured in industry by purchasing cloth of the quality and specification required, number of machines installed for manufacturing gowns with good capacity. In the same of number of cathode rat oscilloscope's purchased to check patient position by using their print out. The untouched technology is created so that every machine installed in hospital can be utilized for the purpose of testing. Artificial intelligence process is used by collecting data from various resources. Robots are employed for reducing the number of workers involved in the process, lot of investment is done to increase the number of beds by increasing the*

manufacturing capacity of beds desired on immediate basis and even more number of hospitals is directed to spare their beds for corona virus patients. This all has been done to create facilities to save life of patients. As in most of the hospitals have scarcity of equipment's therefore manufacturing industries helped to manufacture different equipment's. The issue of employee was also the issue as doctors was also not available but after providing gowns and facilities the improvement found in the system. The doctors were asked to wear masks, social distancing, washing of hands were taken as the precautionary measures. Due to wearing masks for twenty four hours on nose and mouth the other issue like suffocation and breathing issue came but this was resolved .Doctors have played a very important role in hospitals by giving duty for 24 hours and to save life of patients. The masks were not available in the beginning as the doctors were using the same mask which they use and dispose after use but it was not possible for the corona virus patients as well as the persons not affected by virus, therefore standard type of masks are manufactured by different agencies as the mask requires different layer of safety in production therefore three to four layers of cloths are cut and by using machines the production started and during production it was found the shortage of cloth as every industry was effected by virus but somehow managed. First this issue was resolved then issue of social distancing govt. announced number of days lockdown in different phases which has helped to control up to some percentage, then suggestion given to wash your hand regularly as the virus comes in hand just by touching anything, now the question came production of washing soap as the industries were not ready to meet the demand due to the shortage of labor but somehow various techniques were used to manufacture. The issue of health is maintained by increasing the immunity of all by proving different Ayurveda medicines as well as different plants used to save life as to increase immunity this was essential.

Solution*: The issue of testing is resolved by increasing different testing facilities at various hospitals as well as different agencies helped in testing but in the beginning testing facilities and the technical equipment's were not available therefore manufactures have started manufacturing by using masks and tried to use un touch technology. The untouched technology is created to resolve this issue.*

Focus on manufacture of medicines:-Testing facilities for manufacture of medicines are started by different agencies and scientists are working on this to develop medicine which can save the life of all and for this purpose the Ayurveda scientists have also started manufacturing medicines by using various plants which can remove virus and increase

immunity. The other doctors and scientist have also started manufacturing medicines and trial of testing is done on various phases started use of medicines on animals then corona virus patients in different phases and at present fourth phase is going on at some places and some places fifth phase is going on but still it will take long time to manufacture unless sure about the medicine.

How to save economy by creating various options: For saving economy the mandatory precautions given by government to be used for saving economy by opening everything slowly till the time medicine is not available and by that time the use of mask, social distancing, washing hands regularly, using sanitizers at every place like an example battery rickshaw, metro coaches, buses, industry gates and the place where employees are sitting to be sanitized, buses to run as per the sitting capacity and whenever anything is purchased to be kept outside for at least two days and then only used, even while moving outside and coming back to home clothes to be removed and bath to be taken and hand wash, shoes to be kept outside as it may carry virus from road. The economy can be increased by allowing all to work with precautions and untouched technology to be developed by using Artificial Intelligence by collecting data. All educational institutions to use on line classes only as large section of students in schools, colleges, universities movement is not possible to control as everyone want to discuss something with their teachers and this on line technology can be easily used from home itself and the parents must pay fees of students so that the teacher's salary may not effect as well as management to get money to maintain business. At the present current scenario the option is to use latest technologies to become the self-starter as well as innovate with new ideas. This will not only help the economy as well as save the life of big population in world.

How to control pollution:- It has been observed that most of the agriculturist burn their parali which after burning creates pollution and mixes with the air and in air the virus moves faster and effect the population. Recently technology is developed to use chemicals to make composite material by using parali instead of burning which one side controls pollution and other side composite helps in the growth of plantations on agricultural land. This development is done by scientists at Indian Agricultural Institute (IARI) New Delhi and the Government of Delhi is helping farmers by investing money from Government side without any burden on farmers. In the same way the vehicles producing pollution, Building construction creating pollution, Transport overloaded beyond the capacity and old engine produces pollution, chimneys used in industry in city area for production creates pollution. All to be controlled by various

techniques available. Ultimately the spread of virus to be controlled.

How supply chain management can help to short out issues: This is possible if all the seven drivers like availability of transportation, facilities, information of technology, distributer, and retailers, Digital control for using debit and credit card, NEFT etc.

Result:-Suggested further study and most important is to manufacture medicine is the only solution to save life from virus and the other things are just the saving for some time not a long run solution.

Acknowledgement:-

Reference:

1- Various hospitals survey.
2- Available info from social Media platforms.
3- Visiting markets to see the effect of mandatory rules imposed.
4- First time such kind of virus came which has affected the whole world and taken many lives
5- Supply chain management