Robot Nurse for CFLTC Nattika

(12 Sept 2020)

Government engineering college Thrissur has implemented three projects in covid front line treatment center Nattika. The LULU-CFLTC nattika is the largest covid frontline treatment center in Kerala having a capacity of 1500 beds.

We have deployed six automatic Robot nurses in Cfltc Nattika . The project is funded by NABARD under Rural Infrastructure Promotion Fund (RIPF).

- The Automatic Robot nurse is an implementation of the Industrial Line follower. This Robot is capable of taking values like Temperature, pressure and SPO2 level of patients who are admitted in cfltc.It is the first time this kind of Robot is implemented in medical fields with automated controls with minimum human assistance which can cover large numbers of patients in a single stretch. The Robot can work in shifts three times a day to monitor patients which can cover about 250 patients in a shift. The doctors can communicate with patients using the telemedicine feature implemented in Robot. The Robot can reduce the workload on medical staff in monitoring the patients and chance of infection. The Robot is able to know whether a patient is active in a bed or not by fetching active bed details from patient management software. The patient status, values and details are transferred in realtime to the control center. Robots are deployed in each section having patient strength of 200 in cfltc.
  The robots can interact with patients and their needs can be communicated with the control center.
  Each Robot is deployed in a section having 200 beds.


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Newspaper links:



COVID INNOVATION

Engineering students develop assistive robots to aid healthcare workers

Steni Simon

Healthcare workers on the frontlines in the battle against Covid-19 are not only at a higher risk of getting infected but also in spreading the same to their families. To help reduce the risk, a group of engineering students have come up with socially assistive robot nurses.

Designed and developed by Sourav P S, Ashwin Kumar K, Tony C Abraham, Ajay Aravind and Sidharth V, students of Government Engineering College, Thrissur, under the guidance of Ajay James, assistant professor, the project has been funded by National Bank for Agriculture and Rural Development (Nabard) under the Rural Infrastructure Promotion Fund (RIPF). "Healthcare workers are highly exposed to the virus while assisting patients at hospitals and Covid treatment centres. The automatic robot nurses will not only help in checking the temperature, pressure and SPO2 level of patients admitted but also reduce the risk of healthcare workers being exposed to the virus," said Ajay James, assistant professor at GEC, Thrissur.

Six automatic robot nurses have already been deployed at the largest Covid First-Line Treatment Centre (CFLTC) recently inaugurated at Nattika, Thrissur, with a 1,400-bed facility. "Such a robot with minimum human assistance attending to a large number of patients is being implemented for the first time in the medical field," said Ajay.

The team behind Automatic Robot Nurses developed in association with Nabard

How it works

The automatic robot nurse is derived from the 'Industrial Line Follower Robot'. It can work in shifts three times a day to monitor patients and can cover 250 patients in a single shift. Doctors can communicate with patients using the telemedicine feature embedded in the robot. The robot also detects whether a patient is active in a bed or not. The patient's current health status, the value of readings and details are transferred in real-time to the control centre. The robots can interact with patients and their needs can be communicated with the control centre.

E-bike developed by students to ferry food and other materials to stations inside the CFLTC

A team of students comprising Kowsik Nandagopan, Irshad P and Arun Jishnu have developed a management software for efficient bed allocation and patient management. The features include a pictorial.

E-bike at CFLTC

An e-bike has also been developed by Muhammed Arif, Evin Wilson, Glinz George and Pranav Balachandran, another group of students from the same college. The e-bike is a manned vehicle which can carry food and other materials to stations inside the CFLTC. Around 100kg can be carried in a single ride thereby ensuring efficient transportation and distribution of food to patients in minimum time. The bike is electric, thereby making it pollution-free.

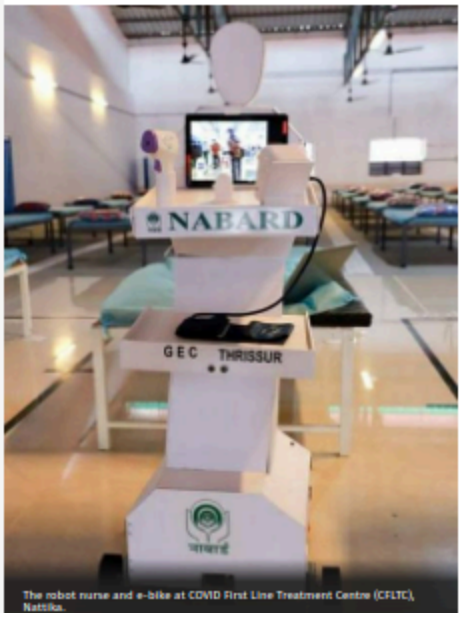
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Robot nurses to care for patients at Nattika COVID-19 centre

SPECIAL CORRESPONDENT

THRISSUR , SEPTEMBER 20, 2020 00:50 IST
UPDATED: SEPTEMBER 20, 2020 00:50 IST

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The robot nurse and e-bike at COVID First Line Treatment Centre (CFLTC), Nattika.

Students of Thrissur Engineering College deploy machine at State's biggest CFLTC

Robot nurses will attend to COVID-19 patients at the COVID First Line Treatment Centre (CFLTC), Nattika, the biggest such centre in the State with 1,400 beds.

The Government Engineering College, Thrissur, has deployed six robot nurses at the centre. The college has also developed an e-bike for food distribution and a patient management software for the centre.

A team of young engineers, Sourav P.S. , Aswin Kumar K., Tony C .Abraham, Ajay Aravind, and Sidharth V. developed the robot. While Muhammad Arif O.S.; Evin Wilson; Glinz George ,and Pranav Balachandran developed the e-bike, Kowsik Nandagopan, Irshad P.I., and Arun Jishnu are the brain behind the patient management software. Dr. Ajay James, Assistant Professor, is their mentor.

The same team has developed "Sanitizer Kunjappan",a robot for sanitisation; aerosol box and WISK for collecting samples from people for COVID-19 tests. The



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ak is expected in another three weeks, with our doubling time being 23 days. And the state may report 5,000 to

nanthapuram medical college, who was part of the team that went to Mumbai to treat Covid patients.

had projected that Kerala will see 90,000 cases and 400 deaths by September 12. The actual number of cases was

evan Raksha.

However, senior health officials said that they are not worried about the increasing

tinue with 7.5 to 8 million Covid cases and 1.10 lakh to 1.25 lakh deaths before October 12.

asymptomatic, then they may work in the areas exclusively marked for the work to be done by the asymptomatic

asymptomatic suggestion wa the guidelines department p

Rape survivor attempts suicide at hosp

Kottayam: The timely intervention of the staff of medical college hospital on Thursday foiled a suicide bid by the 20-yearold Covid-19 patient, who was raped by the driver of an ambulance. The incident happened around 2pm on Thursday. The woman's mother was also staying with her. A nursing staff noticed her going inside the room and locking from inside when her mother had gone to the next building to dry the washed clothes.

The staff immediately informed the nursing officer and the staff members rushed to the room and asked her to open the room. She was heard saying from inside that "I don't want to live". When the staff broke open the door, she appeared to be getting ready for the extreme act. She was holding two towels tied together to make it long. She was restrained by the staff and was put on sedation. Doctors assume that she is under severe mental trauma due

Robotic nurses take charge at Nattika FLTC

Ramavarman T | TNN

Thrissur: Six robot-nurses and an e-bike have been deployed at the state's largest First-Line Treatment Centre (FLTC) at Nattika here that can accommodate 1,400 patients.

The developers have claimed that robots are being used for the first time in Covid healthcare in the state.

The robots and e-bike were developed by a team of faculty members and students of the Government Engineering College (GEC), Thrissur, as part of a project funded by the National Bank for Agriculture and Rural Development (Nabard).


Robotic Nursing Staff can measure vitals and also help patients interact with doctors

According to official sources, the robots are capable of measuring temperature, blood pressure, and oxygen level. The e-bike is a manned vehicle that can carry food and other materials to stations inside the FLTC.

Ajay James who led the product development team comprising eight students said these machines can significantly augment the patient care facilities at the FLTC while reducing the requirement of more staff and also lowering the threat of infection.

He said Robotic Nursing Staff (RoNS) uses the principle of Industrial Line follower robot and proceeds along a specific black line drawn on the floor. At the bedside, it takes a 90-degree turn and reads the RFID card attached to the bed. "The robots will carry thermometers, pulse-oximeters (for measuring the oxygen level of the patients), and BP apparatuses. The readings will be communicated to the control centre. The robots can interact with patients about their needs and communicate the same with the control centre.

"Doctors can interact with the patients using the telemedicine feature implemented in the robots," said Dr K N Satish, deputy DMO who has been designated as the nodal officer for FLTCs in the district. The control centre can be set outside the ward.

Food items weighing about 100kgs can be carried in a single stretch on the e-bike, thus ensuring the efficiency of food distribution in a minimum time.

Deepa Pillai, the assistant general manager of Nabard, said that about Rs 5 lakh was provided for the development of the machines from its fund earmarked for promoting innovation in rural infrastructure.

According to Dr Satish the FLTC that has been set up at the Nattika Cotton Mill building complex has nearly 50 patients now.

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Engg students develop assistive robots to aid health workers

Healthcare workers on the frontlines in the battle against Covid-19 are not only at a higher risk of getting infected but also in spreading the same to their families.

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The team behind Automatic Robot Nurses developed in association with Nabard.

By Steni Simon

Express News Service

KOCHI: Healthcare workers on the frontlines in the battle against Covid-19 are not only at a higher risk of getting infected but also in spreading the same to their families. To help reduce the risk, a group of engineering students have come up with socially assistive robot nurses.Designed and developed by Sourav P S, Ashwin Kumar K, Tony C Abraham, Ajay

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https://thedailypodium.com/robot-nurses-to-take-care-of-sufferers-at-nattika-covid-19-centre/

Public Relations department post:

https://www.facebook.com/2483632581704436/posts/3507921732608844/

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Chief minister of Kerala mentioned about the work during inauguration of CFLTC

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00:52 to 01:28 ----- mentioned about our works and congratulated us

District program manager, Arogyakeralam National Health Mission
Dr. Satheesan
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Nodal officer LULU-CFLTC Nattika
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