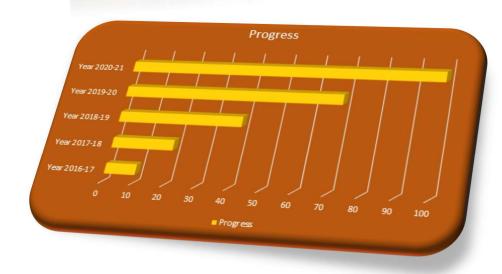




# Regional Resource Centre (Eastern Region) Telemedicine



Annual Report 2019-20







Institute of Medical Sciences
Banaras Hindu University
Varanasi-221005





# Institute of Medical Sciences Banaras Hindu University Varanasi-221005



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प्रो० राकेश भटनागर कुलपति

Prof. Rakesh Bhatnagar Ph.D.

FNA, FASc, FNASc

Vice-Chancellor





#### Message

# काशी हिन्दू विश्वविद्यालय Banaras Hindu University

(Established by Parliament by Notification No. 225 of 1916)

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The Regional Resource Centre (Eastern Region) is running Telemedicine facility at Sir Sunderlal Hospital, BHU. Since its inception the Regional Resource Centre (Eastern Region) has moved forward to serve its services in national health and wellness. This facility is playing a crucial role in University especially during this period of COVID 19 pandemic.

The Regional Resource Centre (Eastern Region) is conducting various online activities like Tele OPD, online lectures, meetings etc. The Tele OPD facility has become a boon not only to the people of the region but also to the citizens of the entire country specially those who belongs to remote areas and have lesser access to the quality health care services. The staff of Regional Resource Centre (Eastern Region) are working with full devotion and with full effort for uninterrupted health service delivery. I am very grateful to Ministry of Health and Family Welfare for providing such a great opportunity to Banaras Hindu University. I am confident that Regional Resource Centre (Eastern Region) will play very important role in super specialist health care delivery at doorsteps in future.

I congratulate everyone associated with Regional Resource Centre (Eastern Region) and extend my best wishes for the future endeavors of the the Centre.

(Rakesh Bhatnagar)

# प्रो० विजय कुमार शुक्ल कुलगुरू

Prof. Vijay Kumar Shukla Rector



फोन / Phone – 0542-2368938 फैक्ल / Fax -2369100 **ई-मेल** / email - rector@bhu.ac.in



#### Message

I am delighted to write my views about Telemedicine facility running at Sir Sunderlal Hospital, Institute of Medical Sciences, Banaras Hindu University. The facility is playing a crucial role in university especially during this period of COVID 19 pandemic. The staff of Regional Resource Centre (Eastern Region) are working with full devotion and with full effort for uninterrupted health service delivery.

Since from establishment, Regional Resource Centre (Eastern Region) slowly moved forward to serve its services in national health and wellness. Regional Resource Centre (Eastern Region) has now become very essential part of university and handling various online activities like Tele OPD, online lectures, meetings with government departments etc. It is very helpful to citizens, which are not able to commute to bigger hospitals as Regional Resource Centre (Eastern Region) Telemedicine is delivering expert medical consultation remotely. The establishment of this facility is boon to remote rural areas of eastern India and specially Purvanchal region. As per present scenario, there is no any doubt to say that, Future of Health care is Telemedicine.

I am wishing all staffs of Regional Resource Centre (Eastern Region) best of luck and it is sure that Regional Resource Centre (Eastern Region) will play very important role in super specialist health care delivery at doorsteps in future.

I am very grateful to Ministry of Health and Family Welfare for providing such a great opportunity to Banaras Hindu University as by establishment and initiation of this facility, we are able to provide health care services to those areas which are still devoid of expert medical care.

(Vijay Kumar Shukla)





निदेशक कार्यालय चिकित्सा विज्ञान संस्थान

Office of the DIRECTOR Institute of Medical Sciences

Prof. R. K. Jain



#### **MESSAGE**

I am very glad to write about Regional Resource Centre (Eastern Region) Telemedicine and it's a great opportunity to run this facility under Institute of Medical Sciences.

I feel extremely satisfied with the services delivered by Telemedicine. The staffs working there in office are well trained and expert in their field and are devoted in remote health care services. The facility never slowed down. The effort of office in delivering services are consistent and excellent. Staffs are sincere, hardworking and honest to their duties.

Telemedicine Banaras Hindu University playing most important role during this pandemic of COVID 19 as it is the Regional Resource Centre (Eastern Region) Telemedicine which is devoted for delivering health services with the help of Sir Sunderlal Hospital, Banaras Hindu University. They are facilitating OPD operation, online lectures, online exams, MCI inspection, Seminars, Conferences, interviews, meetings with government department and many other services.

At last, I convey my blessings to Regional Resource Centre (Eastern Region) Telemedicine and staffs and also I am very thankful to Ministry of Health and Family Welfare for establishing such type of center at Institute of Medical Sciences, Banaras Hindu University

July 24, 2020



PROF. R K JAIN DIRECTOR

Varanasi 221005, UP, INDIA T: 0542-2367568; 2307500 F: (91) 0542-2367568 E: directorims@gmail.com W: www.bhu.ac.in/ims





चिकित्सा अधीक्षक कार्यालय सर सुन्दरलाल चिकित्सालय Office of the MEDICAL SUPERINTENDENT SIR SUNDERLAL HOSPITAL

Prof. Sharad Kumar Mathur Medical Superintendent Sir Sunderlal Hospital IMS, BHU, Varanasi



It gives me an immense pleasure to write about Telemedicine facility running at Sir Sunderlal Hospital, Institute of Medical Science, Banaras Hindu University Varanasi. The facility has proved its importance since establishment and is helping us to reach out those locations, which are still devoid of expert medical care. The facility is working in multidimensional health care services and other aspects, which are beneficial to citizens as well as health system. During the COVID-19 pandemic telemedicine facility available at our hospital is playing very important role. When all the OPD and academic activities were not possible as usual, telemedicine services came in front and facilitated Tele-OPD and patient got benefited in such hard time.

All the Staff of Regional Resource center (Eastern Region) Telemedicine, Institute of Medical Sciences, Banaras Hindu University are very passionate and working hard in current situation for public health interest. The Telemedicine services are extremely important and need to be operated smoothly in national health interest.

Lastly, I would like to convey my best wishes to Regional Resource Centre (Eastern Region) Telemedicine. I am thankful to Ministry of Health and Family Welfare, Govt. of India for establishment of such system at Institute of Medical Sciences, BHU.

August 12, 2020

(Prof. S. K. Mathur) Medical Superintendent







Varanasi-221005, INDIA



#### **MESSAGE**

It's a very proud moment for me to write about Regional Resource Centre (Eastern Region) for Annual Report 2019-20. I am delighted that, Regional Resource Centre (Eastern Region) is releasing annual report 2019-20 on August 15 2020. Though I was superannuated on 30<sup>th</sup> June 2020 from IMS, Banaras Hindu University, however, I tried my best to develop and expand services of Telemedicine facility, while I was Coordinator of the office from 2017 to 12<sup>th</sup> April 2020. The team of telemedicine is very hard working and always gave their best to deploy services of Telemedicine in public health interest and to facilitate the online services by medical fraternity. Some planned works remained unexecuted in my tenure but I am very happy about newly appointed dynamic nodal officer of the center and I am very sure that, he will accomplish the planned project at Regional Resource Centre (Eastern Region).

I came to know that, in this pandemic of COVID 19, Telemedicine is playing a crucial role to deliver patient care and facilitating various online activities at national-international level. Though, I am superannuated but still I am always ready to extend my services / guidance to Regional Resource Centre (Eastern Region). My heartfelt wish is to see Regional Resource Centre (Eastern Region) IMS BHU as apex organization in Health care system in country.

My best wishes to the team of telemedicine and my sincere thanks to Ministry of health and family Welfare, New Delhi for supporting such a great setup in health care system at IMS, BHU. I am also very thankful to IMS and BHU administration for giving me this opportunity to establish Telemedicine facility, as the future of health care is Telemedicine.

August 14, 2020

(Prof. Ratan K. Srivastava)

स्वच्छ भारत एक कटम स्वच्छना की ओर

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### Regional Resource Centre (Eastern Region) Telemedicine क्षेत्रीय संसाधन केंद्र (पूर्वी क्षेत्र)

Institute of Medical Sciences चिकित्सा विज्ञान संस्थान

Prof NK Agrawal
MD (Med), DM (Endo)
Department of Endocrinology and Metabolism, IMS, BHU
Associate Dean (Research), IMS, BHU
Nodal Officer, RRC (ER) TM, IMS BHU



It gives me an immense pleasure in presenting the annual report 2019-20 of Regional Resource Center (Eastern Region) Telemedicine, Institute of Medical Sciences, Banaras Hindu University.

The center was initiated in late 2017 with the intent to provide high quality contents for medical education, to create a facilities for tele-consultations, and tele-evidence. The infrastructure was set up during the year 2018. Since then, the center has been active and recently it was keenly involved in the tele-consultation services and carrying out academic activities of the Institute of Medical Sciences during COVID-19 pandemic. The support of staff members of this center has been immense in this journey.

The Regional Resource Centre (Eastern Region) Telemedicine will endeavor to enhance the activities for the purpose it is created.

Thank you

August 10, 2020

(Prof. Neeraj K. Agrawal)





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# **INTRODUCTION**

There was a long-felt need for dissemination of medical expertise for the students of medical colleges; and for the patients from rural and remote areas devoid of advanced care, as maximum number of causalities may happen in need of expert medical care.

To facilitate this and to expand the services of advance hospitals to remote areas, Ministry of Health and Family Welfare, Government of India established National Medical College Network (NMCN) of identified medical colleges connected on a common platform through high speed internet (supported by National Knowledge Network). This would generate high quality medical educational contents to transfer knowledge among these medical colleges of India and all over the nation through www.nmcn.in, share their expertise in the field of medical sciences and provide expert medical facility online through telemedicine. It could reduce unnecessary commuting of patients and overcrowding of hospitals for minor health issues and post-operative/treatment follow-ups. In addition, to deliver expert medical care, satellite healthcare nodes (patient end) were proposed, connected to their parent advance hospitals (doctors' end) with support of State government, local administration and Indian Space Research Organization (ISRO). One National Resource Center (NRC) and seven Regional Resource Centre (RRC) were created by MoH&FW. The Regional Resource Centre (Eastern Region), Telemedicine is one of the RRC established at Institute of Medical Sciences, Banaras Hindu University, Varanasi to cater Eastern region of India.

The establishment, development of infrastructure and installation of equipments for the purpose was started at Regional Resource Centre (Eastern Region) at Institute of Medical Sciences, BHU, Varanasi in the year 2017 after signing MoU between Banaras Hindu University and MoH&FW, Government of India.

Initially, the services of telemedicine, Institute of Medical Sciences, BHU were supported by NRC-SGPGI-Lucknow and later on Regional Resource Centre (Eastern Region) recruited its own staff from January 2019 onwards and gradually the services from the Regional Resource Centre (Eastern Region) are expanding day by day.

The smart class (digital lecture theatre) established at Institute of Medical Sciences BHU under NMCN is operated by personnel appointed by Yash Technologies Pvt. Ltd. Numerous online lectures and activities were broadcasted live through this smart class.

Various essential services are ready to be started in coming months in national health interest aiming to serve remote areas of Eastern India.

In COVID 19 pandemic, the Regional Resource Centre (Eastern Region), IMS, BHU is playing a crucial role in delivering medical services to patients, facilitating routine lectures of IMS, and regular meetings with government departments; and is fully devoted in national health interest.

# **BACKGROUND**

#### **Initiation of facility in 2016:**

The outline of Regional Resource Centre (Eastern Region) was drawn in consultation with NRC-SGPGIMS Lucknow. It was proposed that a Regional Resource Centre (RRC) may be created at the IMS, BHU, Uttar Pradesh instead of SGPGI Lucknow under NMCN Scheme for handling the day to day activities pertaining to NMCN scheme for the states of Bihar, Jharkhand, and West Bengal. This RRC was delegated the task to look after the eastern region of the country and thus it may be called as the RRC-East under NMCN scheme. Since all other RRCs have been regularly strengthened by MoHFW by providing Grant-In-Aid (GIA), it is proposed that initially National Resource Centre (NRC) may be delegated the task to technically upgrade the IMS, BHU by creating a Telemedicine Centre.

Afterwards, meetings were convened for detailed proposal and to start the facility at Institute of Medical Sciences, Banaras Hindu University.

#### 2017

The budget was received in October 2017 and renovation and creation of physical infrastructure was started in the premises of Sir Sunderlal Hospital, Institute of Medical Sciences BHU. The office of Regional Resource Centre (Eastern Region) has one Nodal officer Chamber, one reception, one E-Presence room, one Virtual OPD, one Server room, one Board room, one doctors' lounge, one UPS room and one Digital lecture theatre ( at IMS).

#### 2018

The facility was started with manpower support of NRC-SGPGI. Initially, two ISRO nodes i.e. Kashi Vishwanath Temple Node running at SSPG Divisional hospital, Kabirchaura, Varanasi and Vindhyachal Dham Node running at CHC Vindhyachal became operational. Later on, these two nodes were handed over by SGPGIMS to Institute of Medical Sciences, BHU. Two manpower were also deputed form Yash technologies to run smart class under NMCN.

# **CURRENT STATUS**

The Regional Resource Centre (Eastern Region) is fully functional from 2019 and is expanding services in following disciplines:

- > Tele-Education
- **➤** Tele-Medicine
- > Tele-Radiology
- > Tele-Evidence
- **Electronic COVID Care Support**
- > Tele-Medicine Hub for 102 HWCs of 5 districts of Purvnachal.

#### 2019-20

After taking over the ISRO nodes and receiving permission from Ministry of Health and Family Welfare, Govt. of India, the Regional Resource Centre (Eastern Region) started procedure for recruitment of manpower. From January onwards, as per directions received form Banaras Hindu University administration four Telemedicine Technicians, 1 Content Developer, 1 Multi-Tasking staff were outsourced form external outsourcing agency. One post of Radiologist (under CORS) was filled through walk-in-interview in December 2018 but again became vacant in January 2019. One post of Senior Manager (Operation) was filled-up in August 2019. Efforts are continuously being made to start other facilities like Tele-Radiology, Tele-Evidence etc. Details of progress of facilities running form Regional Resource Centre (Eastern Region) is as under:

#### **Tele-consultation:**

Tele-consultation is need of the hour now to cut short load on hospitals and to save money and time. For minor ailments one needs to travel to bigger hospitals and sometimes casualties occurs due to lack of specialist care at remote areas. To overcome this, an idea of remote patient care was originated and it was planned to deliver specialist medical facility to those regions devoid of such care. To do this, idea of tele-consultation through Virtual OPDs (also called doctors' end) to satellite nodes situated at specific locations (called patient end) are proposed and executed in national health interest. In the same setup, Regional Resource Centre (Eastern Region) started operating and delivering Tele-consultations and for the purpose, it has a separate Virtual OPD having five separate well-furnished compartments with desktop computers with all necessary accessories essential for

tele-consultation and is used for running Tele-OPD in Ophthalmology, Dermatology, Orthopedics, General Surgery, General Medicine, Critical care, Pediatrics, Neurology, Obstetrics and Gynecology. Cardiology. The OPD runs from 9 AM to 2:30 PM.

Forty Tele-Consultation has been given from Regional Resource Centre (Eastern Region) to two outreach ISRO Nodes up to 30<sup>th</sup> March 2020. Due to COVID 19, the services through specific platform was paused, as CHC Vindhyachal was converted into COVID hospital and OPD from SSPG divisional hospital was on hold; but Regional Resource Centre (Eastern Region) started giving teleconsultation through phone in national health interest. In COVID 19 pandemic, Regional Resource Centre (Eastern Region) is running Tele-OPD since 7<sup>th</sup> April 2020 from 9 AM to 5 PM of 22 departments including Ayurveda, and patients are advised on video calls if necessary other than audio call. They are sending reports on WhatsApp numbers for post-operative and treatment follow-ups. Serious patients are called in emergency and are attended there. Till 14<sup>th</sup> August 2020, approximately more than 47000 calls has been received in our Tele-OPD and tele-consultation was delivered successfully. The staff of Regional Resource Centre (Eastern Region) are maintaining data bank of patients department wise on daily basis and facilitating services with full devotion.

#### **Tele-Education:**

As Regional Resource Centre (Eastern Region) is connected to 50 medical colleges of continuously making efforts to generate best quality e-content in national health interest. There is a smart lecture theatre with seating capacity of **140** persons, equipped with hi-tech equipments which is supported and driven by two personnel (1 Content Developer and 1 Audio Visual Technician) deployed from ERNET through Yash Technologies Pvt. Ltd. From this class, regular e-lectures are scheduled and telecasted on NMCN network. The facility is being utilized to conduct special lectures, e-conferences, seminars etc.

No. of Online lecture held on NMCN platform: 68 No. of E-lectures uploaded on NMCN Website: 12

In COVID 19 pandemic, online lectures are paused due to COVID preventive protocols but Regional Resource Centre (Eastern Region) started facilitating routine lecture of IMS i.e. MBBS classes, PG classes, DM Classes, Journal Clubs, Clinical Society meeting, Research Project Formulation Lecture Series, Classes of Faculty of Dental Sciences and College of Nursing.

Approximately, more than 900 e-classes has been conducted from Regional Resource Centre (Eastern Region) in this pandemic using online platforms like Cisco WebEx, ZOOM, Google Meet and very soon all will be uploaded on NMCN portal for global accessibility.

There is a Board Room with seating capacity of 40 persons in Regional Resource Centre (Eastern Region), IMS, Banaras Hindu University. It is being utilized to facilitate routine meetings with Govt. departments, Ministry, Meetings of various departments, online Trainings, Webinars, Pre-Bid meetings, Online workshop of Curriculum Implementation Support Program (CISP-I to IV,

Medical Education Unit, Institute of Medical Sciences BHU) and other online programs. A Yoga program on National Yoga Day was telecasted on **21 June 2020** from Regional Resource Centre (Eastern Region), Telemedicine, IMS, BHU.

#### **Special Events:**

Regional Resource Centre (Eastern Region) is facilitating various national international conferences of institute on its platform through Digital Lecture Theatre and from Board Room of RRC.

#### **Tele-Evidence:**

Tele-Evidence/E-Presence of Regional Resource Centre (Eastern Region), IMS, BHU was created for facilitating evidence provided in medico-legal cases online. For attending medico-legal cases, the consultants of Sir Sunderlal Hospital, Institute of Medical Sciences, Banaras Hindu University have to go outstation very frequently, as there are more than 250 medico-legal cases per month to be attended by SSL Hospital Banaras Hindu University from nearby districts of UP (Deoria, Gorakhpur, Mau, Chandauli, Sonebhadra, Jaunpur, Mirzapur, etc.) and Bihar (Bhabhua, Sasaram, Gaya, etc.). To be able to appear as witness in one medico legal case, the consultants have to leave hospital duties (for at least 3 days for distant cases and one day for nearby cases). This results in difficulties for other patients. To overcome this, initiation of Tele-Evidence facility was planned and the efforts are being made to start the facility at earliest. E-Presence room of Regional Resource Centre (Eastern Region) will be connected to courts of Uttar Pradesh and Bihar where medico-legal cases are attended by concerned consultants. The correspondence has already been made to respective courts and the courts are agreed and ready to support and start the facility.

Now, Regional Resource Centre (Eastern Region) is ready to start this facility in forth coming months after getting connected with courts. Through E-Presence, consultant will witness the case online sitting in e-presence room. After installation of necessary equipments the facility will be started.

## **Tele-Radiology:**

The Tele-Radiology under CORS (CollabDDS Online Radiological Services) is meant for delivery of expert radiological opinions and advice to remote centers. As of now, Regional Resource Centre (Eastern Region) is ready to deliver Tele-Radiology services to connected centers i.e. District Hospital Latehar and District Hospital Godda (Jharkhand). The correspondence to these centers are made in July 2019 and infrastructure at these centers is ready. Regional Resource Centre (Eastern Region) has already asked for permission from Ministry to permit procurement of X-Ray scanner costing around 3 lakhs. After the permission is granted by the authority, the scanner will be procured.

A Radiologist was recruited under this project in December 2018 but she resigned in January 2019 and since then, the post is vacant. The post is again advertised now to fill the position and Tele-Radiology will be started after filling post and procurement of desired equipments for remote centers.

# **Electronic COVID Care and Support (eCCS)**

Regional Resource Centre (Eastern Region) Telemedicine, IMS, BHU is running eCCS from midweek of June 2020 as per direction received from Government of Uttar Pradesh and acting as advance hub for giving super specialist advice/consultation to L1, L2 and L3 hospitals. The service is available from 8 AM to 8 PM except Sundays. Two dedicated mobile numbers are used for the purpose and cases are received on dedicated email ID. Till 14<sup>th</sup> August 2020, advance consultation to 125 cases delivered successfully. Super specialist consultants of General Medicine, General Surgery, Gynecology, Radio diagnosis, Microbiology and Critical Care/Anesthesiology are deputed for the eCCS duty available from 8 AM to 8 PM. The consultants from other departments are on call basis and give their expert advice on call. The staff of Regional Resource Centre (Eastern Region) are working form 8 AM to 8 PM to facilitate the services of eCCS.

### **Services during COVID 19**

The Regional Resource Centre (Eastern Region) Telemedicine, Institute of Medical Sciences, BHU Varanasi is fully devoted to deliver health services in this pandemic, and in lockdown period, the office continuously worked in national health interest. Various meetings in relation to COVID-19 with government departments are facilitated from the office. Due to lockdown the OPD services of hospitals are temporarily suspended the Regional Resource Centre (Eastern Region) running Tele-OPD through dedicated mobile numbers.

Regular theory classes of Institute of Medical Sciences are facilitated online from Telemedicine Facility. From 1<sup>st</sup> July to 15<sup>th</sup> July the MCI inspection of MD/MS Exam was facilitated through Telemedicine using online platforms. Many faculty members performed as examiners/ MCI experts for other medical colleges. Regular meetings with Principal Secretary UP Government regarding COVID 19 updates for Testing and care are facilitated from the office. Meetings with Honorable Chief Minister, Uttar Pradesh are regularly held form Regional Resource Centre (Eastern Region). Regional Resource Centre (Eastern Region) Telemedicine, IMS BHU is in link with Medical Colleges, state and district falling under RRC- East for latest updates and monitoring.

#### **Tele-Medicine Hub under Ayushman Bharat:**

Regional Resource Centre (Eastern Region) Telemedicine, IMS, BHU is now acting as Telemedicine hub for 102 Health and Wellness of five districts of eastern UP i.e. Varanasi, Chandauli, Ghazipur, Jaunpur and Sonebhadra and giving Tele-Consultation currently to HWCs of Varanasi and in coming month services will be started for other districts too. To run this facility five medical officers are appointed and are providing tele-consultation all over UP from Virtual OPD room currently through eSanjeevani. In addition, 3 super specialist are also deputed from Sir Sunderlal Hospital in Cardiology, Gynecology and Pediatrics for advance level consultation.

All the equipments were procured and salaries are being paid from the budget sanctioned by NHM, Govt. of Uttar Pradesh.

Trainings of CHO/Medical officers of Varanasi was convened on **25.02.2020 & 03.03.2020** and another training of CHO/Medical officers are conducted on 12.08.2020. The aim of the training was to make CHOs/Medical officers train/aware of the technology used to run eSanjeevani smoothly so that, they do not face any issue to facilitate the Tele-Consultation to HWCs/UHCs/PHCs/SCs from Telemedicine hub.

By running this service, Regional Resource Centre (Eastern Region) aiming to deliver expert medical health care facility to zones which are devoid of such care. In the COVID pandemic, the NHM medical officers were asked by NHM UP to provide services on eSanjivani OPD portal for entire UP. More than 1000 consultations have been provided by the existing medical officer. The medical colleges under RRC (Eastern Region) have been asked to contact their state health ministry to create hub for delivering consultations to HWC of surrounding areas. The medical colleges are All India Institute of Medical Sciences (AIIMS), Patna, Darbhanga Medical College, Darbhanga, Patliputra Medical College, Dhanbad, and Burdwan Medical College, Burdwan.

# **PROPOSED WORKS/ FUTURE PLANNING**

Many developmental work/projects are proposed and few are in pipeline to upgrade the existing Telemedicine system of Regional Resource Centre (Eastern Region) and to expand services for benefit of society in respect of health and economy. The proposed project are as under:

# Installation of Health Kiosk in rural area of Varanasi and developing the same as Model Telemedicine Rural Center.

Initially, four Health Kiosk are proposed to be installed in 4 rural areas of Varanasi which are pre identified. By installing these machines, patients are able to talk directly with specialist doctor seated at Regional Resource Centre (Eastern Region) by the help of technical person of that end. Some non-invasive routine test will also be performed through this carts to get quick result and for ease of patients.

By installing this type of Health Kiosk, people residing at remote areas are not bound to travel to bigger hospitals for minor health complaints and they will be treated at their place. This will save time, money as well as cut short load on hospitals. After successful commissioning of these machines, more rural locations will be equipped with such type of facility for maximum remote specialist medical advice.

#### **Procurement of Telemedicine Cart**

Two Telemedicine carts are planned to be procured at Regional Resource Centre (Eastern Region) purposed for live streaming of life saving activities/training form Intensive care Unit. The system will also be used for live streaming of surgeries of educational purpose. This will be movable and can be relocated in OTs or in ICUs or any other place depending on requirement. In this way, a quality educational content will generated in national health interest.

#### **Initiation of Telemedicine Mobile Van**

A Telemedicine bus service is planned to run from Regional Resource Centre (Eastern Region) and the office is working on it. A letter with detailed proposal will be sent to ministry and after approval from competent authority, the project will be executed. The aim of this facility is to deliver advance medical care to those regions where it is not possible to develop infrastructure and through this Regional Resource Centre (Eastern Region) will deliver his expert consultation services to remote locations by camping on routine intervals.

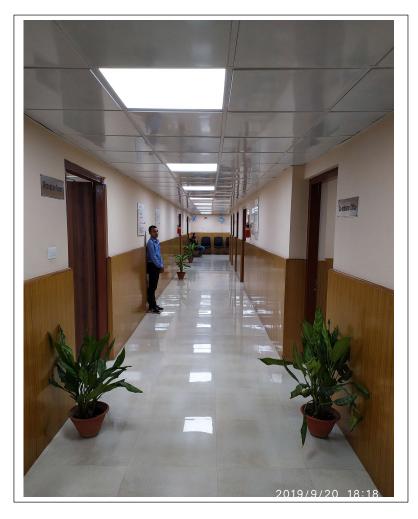
#### **Installation of Storage Server at Regional Resource Centre (Eastern Region)**

Storage Server proposed to be installed at Regional Resource Centre (Eastern Region), Eastern Region for in house recording of e-lectures and special programs conducted form Regional Resource Centre (Eastern Region) and from colleges under RRC. There is a well maintained server room in Regional Resource Centre (Eastern Region) where various server and switches are already installed. The proposed storage server will be installed in the same server room. Regional Resource Centre (Eastern Region) has 32 KVA UPS system for uninterrupted power supply suitable for smooth continuous and operation equipments.

#### **PHOTO GALLERY**



1. Entrance of Regional Resource Centre (Eastern Region) Telemedicine, IMS BHU.



2: Telemedicine office at IMS, BHU



3. Prof. N.K.Agrawal- Nodal officer, RRC- East, Telemedicine



4. Prof. Ratan K. Srivastava, Former Nodal Officer, RRC-East, Telemedicine



5. Staff with Former Nodal Officer





6. Meeting with CMO & NHM officials

7. Meeting with NHM officials and Medical officer



8. Training of Medical officer by C-DAC



9. Training of CHOs by C-DAC



**10.** Dr. Vishnu Swaroop Srivastava, Medical Officer giving online consultation on eSanjeevani.



11. Operation of E-Lectures from RRC-East, IMS,







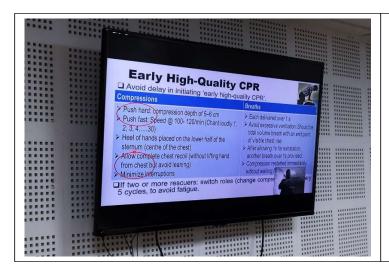


12. Honorable Vice Chancellor, BHU and IMS Faculty attending international meeting to start Bone Marrow Transplant Facility at Banaras Hindu University.





13-a. A Tele-Education session on Basic Life support by Dr. Bikram Gupta and Dr. Badri Das, Dept. of Anaethesia, IMS, BHU.





13-b. A Tele-Education session on Basic Life support by Dr. Bikram Gupta and Dr. Badri Das, Dept. of Anaethesia, IMS, BHU.





14. Tele-Consultations to ISRO Outreach Centers of Regional Resource Centre (Eastern Region)-East, Telemedicine, IMS, BHU











16. Live Telecast of Special Lecture & Educational Movie on Epilepsy through NMCN Network: "Ek Naya Din" by Department of Neurology, Institute of Medical Sciences, BHU

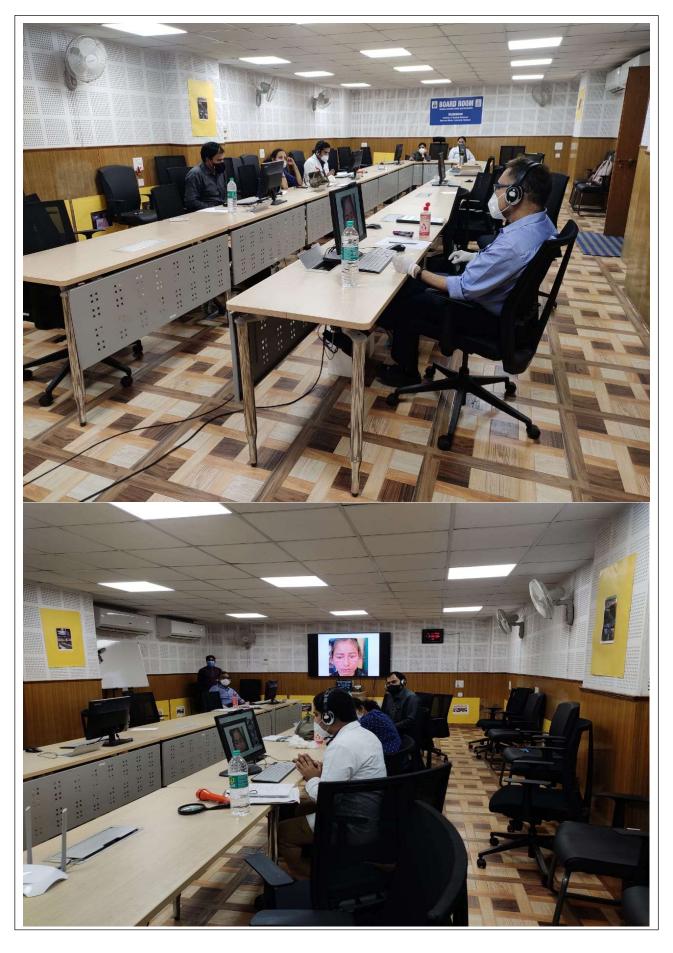








17. Live streaming on NMCN of Special Lecture by Dr. Bharat Rawat, Associate Director, Medanta Hospital, Indore organized by Department of cardiology, Institute of Medical Sciences, BHU



18. Online MD Examination through Telemedicine (MCI INSPECTION)





19. Online Meeting on Blood Transfusion of Department of Pathology



20. Meeting with Dr. Murthy Remilla, Scientist at ISRO Banglore







21. Review Meeting on COVID-19 with Hon'ble Chief Minister of Uttar Pradesh



22. E-Lecture delivery from Board Room of RRC- East, IMS





23. Vindhyachal Dham, Mirzapur Telemedicine ISRO Node Inspection





24. Kashi Vishwanath Temple Node Telemedicine ISRO Node Inspection

#### **Media Coverage**





# BHU hosp starts telemed OPD for gen patients

Sir Sunderlal Hospital of Banaras Hindu University, which is fully equipped with level-3 facilities to meet the challenge of Covid-19 outbreak, is also running a telemedicine OPD for the general patients. Doctors of five departments as per the duty roster are providing their services from 9 am to 5 mm.

"On an average, over 250 patients from eastern UP and other states consult the doctors every day. Most of them are old patients needing follow up consultation," said the BHU spokesperson Rajesh Singh. The telemedicine OPD started functioning from April 7 on the instruction of the vice chancellor Professor Rakesh Bhatnagar. P2

# फोन पर ओपीडी, पहले दिन 250 ने पूछी दवा

#### वाराणसी | कार्यालय संवाददाता

बीएचयू सर सुन्दरलाल अस्पताल की टेलीमेडिसिन ओपीडी मंगलवार से शुरू हुई। पांच विभाग के डॉक्टरों ने ओपीडी संभाली। पहले दिन 250 कॉल की ओपीडी रही। जिसमें डॉक्टरों ने फोन पर लोगों की परेशानियां सुनीं और उसका समाधान किया। कुछ मरीजों को दवाएं बताई गईं, जिबक कुछ को खान-पान व संयमित जीवन का निर्देश दिया गया। डॉक्टरों ने फोन पर ही कुछ लोगों की काउंसिलिंग भी की, जो कोविड-19 से घबराए हुए थे।

डॉक्टरों ने बताया कि अधिकांश लोगों की समस्या तनाव, घबराहट, सिर

# बीएचयू टेलीमेडिसिन

- पांच विभागों के डॉक्टरों ने फोन पर सुनी समस्या, किया समाधान
- तनाव, घबराहट, सुस्ती व सिर दर्द की ज्यादा समस्याएं आई

दर्द व सुस्ती थी। परामर्श के तौर पर डॉक्टरो ने लॉकडाउन के दौरान घर में रह रहे लोगों से अपनी दिनचर्या दुरुस्त करने को कहा। बताया कि अधिकांश समय बिस्तर पर पड़े रहना स्वास्थ्य के लिए हानिकारक है। पठन-पाठन के अलावा कुछ देर व्यायाम के लिए भी निकालें।

कुछ लोगों को दवाइयां भी बताई गई। टेलीमेडिसिन सेंटर में सोशल

## फोन मिलाएं-समाधान पाएं

बीएचयू टेलीमेडिसिन विभाग ने दो नंबर जारी किए हैं सुबह नौ से शाम पांच बजे तक इन पर संपर्क कर सकते हैं।

**0542-2368028, 0542-2368029** पर फोन कर समाधान प्राप्त करें।

डिस्टेंसिंग का पालन करते हुए पांच जगहों पर डॉक्टर बिठाए गए थे।

टेलीमेडिसिन की ओर से जारी हेल्पलाइनके दो नम्बरों पर सुबह नौ बजे से कॉल आनी शुरू हो गई। टेलीमेडिसिन के प्रभारी प्रो. रतन कुमार श्रीवास्तव ने. बताया कि बीएचयू के कुलपित के निर्देश पर विवि प्रशासन ने यह सुविधा आरंभ की है।

# बीएचयू में आज से टेलीमेडिसिन की ओपीडी

वाराणसी। बीएचयू के सर सुन्दरलाल अस्पताल में मंगलवार सात अप्रैल से टेलीमेडिसिन की ओपीडी का संचालन किया जाएगा।

कलपति के साथ हुई बैठक के बाद विवि प्रशासन ने यह सुविधा आरंभ करने का निर्णय लिया है। इसमे रोस्टर पर डॉक्टरों की इयूटी लगेगी। मेडिसिन, जनरल सर्जरी, आर्थोपेडिक, गायनिक तथा बाल रोग विभाग के डॉक्टर परामर्श देंगे। इसमें सीएचसी, पीएचसी से भी लोग वीडियो कान्फ्रसिंग के माध्यम से सलाह प्राप्त करेंगे। अस्पताल के ओर से दो लैंड लाइन नम्बर भी जारी किये गये हैं। 0542-2368028, 2368029इन नम्बरों पर फोन कर टेलीमेडिसन में बैठे डॉक्टर से परामर्श लिया जा सकता है। इससे फालोअप के मरीजों को बडा फायदा होगा।

# लकवा पर बीएचयू में बनी फिल्म देखी गयी

वाराणसी। बीएचयू आईएमएस के भावी डॉक्टरों सहित देश के 21 मेडिकल कालेज के छात्रों ने लकवा पर बीएचयू की ओर से बनी फिल्म 'फिर वही दिन' देखी। न्यूरोलॉजी विभाग के प्रो. विजयनाथ मिश्र के निर्देशन में यह फिल्म बनी है। जिसमें समाज में लकवा को लेकर फैली भ्रांति की जानकारी प्रदान की गई है। इस फिल्म में दिखाया गया है कि भारतीय समाज में लोग लकवा की बीमारी को किस रूप में देखते हैं तथा इसका उपचार कैसे किया जाता है।

सर सुन्दरलाल अस्पताल के क्षेत्रीय संसाधन केंद्र (पूर्वी क्षेत्र) से जुड़े देश भर के 21 मेडिकल कालेजों में यह फिल्म दिखाई गई। प्रो. विजय नाथ मिश्र ने छात्रों को टेलीमेडिसिन नेटवर्क की मदद से लकवा की जानकारी भी दी। न्यूरोलॉजी के विभागाध्यक्ष प्रो. आरएच चौरसिया ने छात्रों को लकवा से बचाव के बारे में बताया।

Telemedicine..."It allows us to connect a patient to a doctor & it allow us to erase time and distance which is really the miracle of Telemedicine.

