

Sustainability Report 2020

3 GOOD HEALTH AND WELL-BEING



KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY (KIIT)

————— Deemed to be University U/S 3 of the UGC Act, 1956 —————



1 Introduction:

The University has been working for the benefits of the society in alignment with the various Sustainable Development Goals (SDGs) of the United Nations. As per UN explanation a successful development agenda requires inclusive partnerships at all levels, be it global, regional, national and local levels that are built upon principles and values, and upon shared vision and shared goals placing people and the planet at the centre. A better world, can only be formed if one is supportive, empathetic, inventive, passionate, and above all, cooperative. International investments and support is needed in order to ensure innovative technological development, fair trade and market access, especially for developing countries.

The Institute emphasizes on the holistic development of the entire community and entire academic fraternity in the state by engaging with the community and regional institutions, and making positive impacts by addressing regional,

national and social issues in diverse domains addressing UN SDGs. It has actively involved in partnering with different countries for the mutual growth and development and has been successful in establishing linkages not only between other countries but also between institutions, governments, companies, NGOs, and people.

KIIT has been working in close association with its sister organization, Kalinga Institute of Social Sciences, its internal societies, various national and international institutes and corporate as well as the central & state governments in this direction to make the feat a reality.

This report consists of four sections. Section 1 provides the introduction to the report, Section 2 mentions the annual goals for attaining and contributing to SDG 17. Section 3 outlines the different policies and initiatives taken by the University in this respect during the year 2020. Section 4 provides the impact of these initiatives.

2 Objective: Enhancing health and good well being

3 Initiatives: The University is focused on providing and ecosystem for good health and well being for its staff , students and the community around and has taken major initiatives in this regard which are discussed in this chapter.

- ✚ Kalinga Institute of Medical Sciences (KIMS), the medical unit of the University is a 2000 bedded super-specialty hospital in the city of Bhubaneswar. All medical services and facilities are available 24x7.



The hospital

- ✚ All students and staff members are covered under medical insurance and have got 24x7 access to all medical facilities of the KIMS.
- ✚ 4 specialized COVID-19 hospitals with total bed capacity of 1050 have been established in the City of Bhubaneswar and in the districts of Balangir, Mayurbhanj and Kandhamal along with quarantine center and isolation facilities in collaboration with Odisha Government and Orissa Mining Corporation. 150000+ patients have been successfully treated.



- ✚ The University has ensured all types of diagnostic facilities (including antigen and RT-PCR test) with approval from the Indian Council of Medical Research. 12000+ tests have been conducted so far.
- ✚ Specialty Clinic for patients suffering from post-COVID syndrome and specialized Post- COVID Mother & Child Clinic have been established.
- ✚ Wellness clinics, COVID Care and Health Care Centers have been established across the state.
- ✚ Telemedicine Facility and online healthcare consultancy with solutions was started in 10 districts of the State.
- ✚ Tele-counseling Cell has been functioning to provide necessary support for stress management and emotional wellness (06747105371) to the different families affected by the pandemic. Counseling cell has been set up to address the issues associated with stress felt by staff members and students if any.
- ✚ Medical clinics exist in different districts of the state providing free medical services and aids to the people of the region and is solely managed by KIMS, the medical unit of the University.
- ✚ Rural Health Centre with Tele-medicine Facility established in Kalarabanka in Odisha state of India provides health-care services to the people of the village and nearby villages. The Centre had been set up by KIMS. It has tele-medicine facilities which allows people of the area to avail expert consultation from eminent doctors of the super-specialty hospital at their doorstep. It also regularly conducts health camps in the village. Local people have benefitted immensely due to health-care facility and awareness by the 100-bedded primary health centre. Likewise, KIMS has made available latest and affordable medical facility through the tele-medicine centre in many parts of the state.

- ✚ Clinical Specialists at KIMS have been providing remote health consultation including diabetic, Rheumatology, Nephrology and other super specialty consultation services, facilitating the regular interaction of doctors and patients of the village for follow up and obtaining expert clinical opinion.
- ✚ KIMS facilitates capturing of patient health data and preservation for certain period time and retrieval for medical analysis, as and when necessary at the time of follow up visits. The interaction with the patients of the village by doctors in KIMS and treatment history are being transcribed and preserved as medical records. The vital parameters of remote patients (like BP, ECG, etc.) are visible to doctors through Tele-presence solutions and there is end-to-end integration of Bio-medical equipment, and video conferencing equipment.
- ✚ Mobile Clinic, High-end patient care including super-specialty services were provided at the door step.
- ✚ Medical camps and awareness programs have been organized in different districts of the state of Odisha to spread awareness on proper hygiene, sanitation, infectious disease control, prevention measures, healthy nutrition for different age groups, and ill effects of tobacco products and alcohol consumption.
- ✚ Wellness clinics have been established in the city of Bhubaneswar and in several districts of the state by the University supported by its medical unit. These clinics provide services associated with naturopathy treatment, counseling services, rehabilitation and de-addiction therapy. So far, more than 2500 people have been cured of mental tension and severe addiction.

✚ Kalinga Institute of Medical Sciences (KIMS), Medical Unit of KIIT was granted permission for conducting Phase III clinical trial of ‘Covovax’, a vaccine against COVID-19, being prepared at Serum Institute of India (SII), Pune in collaboration with the Vaccine Giants, Novovax, USA. It has been selected as one of the 16 sites across India by ICMR-NARI(Pune). Details available at <https://news.kiit.ac.in/kims/covid-19-kims-gets-nod-to-conduct-phase-iii-trial-of-covovax/>

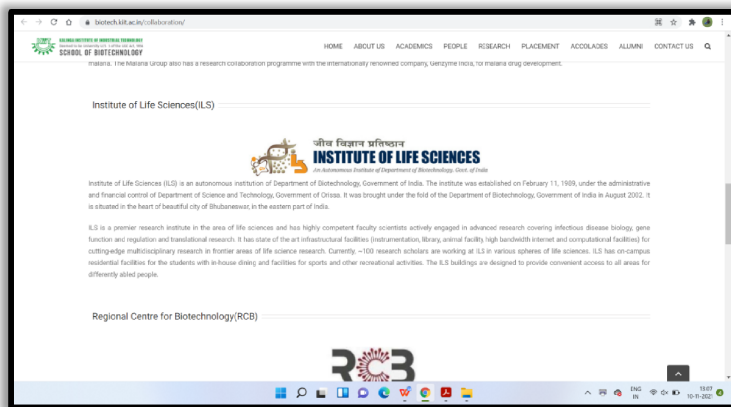
✚ KIIT had ensured all types of diagnostic facilities (including antigen and RT-PCR test) in collaboration with Indian Council of Medical Research. 12000+ tests have been conducted so far. (<http://rmrcbbsr.gov.in/page.php?slug=testing-labs>)

Testing Category	Nos. of Govt. Institute	Nos. of Private Institute
RT-PCR (31 Nos. of testing Institute in Odisha) Govt. Lab-14, Pvt. Lab-17	<ol style="list-style-type: none"> 1. ICMR-Regional Medical Research Centre, Bhubaneswar (Highthroughput Laboratory) 2. All India Institute of Medical Sciences, Bhubaneswar 3. SCB Medical College and Hospital, Cuttack 4. MKCG Medical College, Bhubaneswar 5. Inpat General Hospital, Rourkela 6. Veer Surendra Sai Institute of Medical Science & Research, Sambalpur 7. *Institute of Life Sciences Bhubaneswar 8. *ICMR- International Centre for Foot and Mouth Disease, Khordha, Odisha 9. *Indian Institute of Science Education and Research (IISER), Bhubaneswar 10. #Bina Bhoi Medical College and Hospital, Bolangir 11. #Paridhi Raghunath Murni Medical College, Baripada 12. #Fakir Mohan Medical College and Hospital, Balasore 13. #SN Medical College and Hospital, Konarpur 14. # District Headquarters Hospital, Sundargarh 	<ol style="list-style-type: none"> 1. #Dept of Lab Services, Apollo Hospitals, Bhubaneswar 2. IMS & SJM Hospital, Bhubaneswar 3. IDRA Life Sciences Pvt Ltd, 2nd Floor, KIIT TBI, Bhubaneswar 4. GenX Diagnostics, A13, Mahatma College Road, Sahid Nagar, Bhubaneswar 5. Central Lab, AMRI Hospitals, Plot No 1, Khandajali, Bhubaneswar 6. Kalinga Institute of Medical Science (KIMS), Bhubaneswar 7. Zeunlove Diagnostics LLP, C/O Kalinga Hospital Ltd, Chandrasekharpur, Bhubaneswar 8. Redcliffe Lifesciences Pvt. Ltd., Room No212,2nd Floor,KIT-TRI Patia, Bhubaneswar 9. Hi-Tech Medical College & Hospital, Microbiology Department, Health Park, Pandara, Bhubaneswar, Khordha 10. Hi-Tech Medical College & Hospital, Microbiology Department, Rourkela, R.G.H Campus, Rourkela, Sundergarh 11. Molecular Laboratory, Vikash Multiprocity Hospital,AH-46, Barahaquda Canal Chowk, Bargarh 12. Hi-Tech Diagnostic Centre, Unchabali, Bamebari, Keonjhar 13. Integrated Molecular Diagnostic lab (Tata Steel Medical Research), Kalinganagar Industrial Estate, D.V. Kalinganagar, Dutt

Screenshot from ICMR website

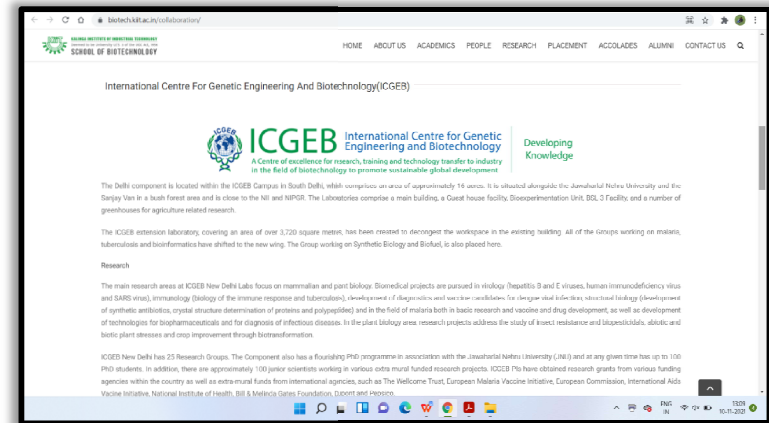
- ✚ Webinars on COVID-19 awareness and Prevention, Impact on Live & Livelihood, Role of Nurses in management of COVID-19, Entrepreneur opportunities during and post COVID-19 etc have been conducted.
- ✚ Awareness on COVID 19 has been created among 500,000+ people in the state.
- ✚ KIIT and Institute of Life Sciences (ILS), Bhubaneswar have signed a Memorandum of

Understanding (MOU) for collaboration of research activities which will go a long way in uplifting health of the society, especially among people of Odisha & Eastern India. <https://biotech.kiit.ac.in/collaboration/>



Screenshot from the weblink

- ✚ School of Public Health, KIIT has been working in collaboration with various health institutions and hospitals. <https://ksph.kiit.ac.in/collaboration/>
- ✚ International Centre For Genetic Engineering And Biotechnology <https://biotech.kiit.ac.in/collaboration/>



Screenshot from the weblink

- ✚ Training Programs were organized on basic life support, cardiopulmonary resuscitation and first aid, and on fire safety and prevention during 2020 with 200+ participants across the state.
- ✚ School of Yoga provides information on yogic practices and its benefits. Awareness programs and special sessions are conducted round the year for students and staff members. The International Yoga Day was

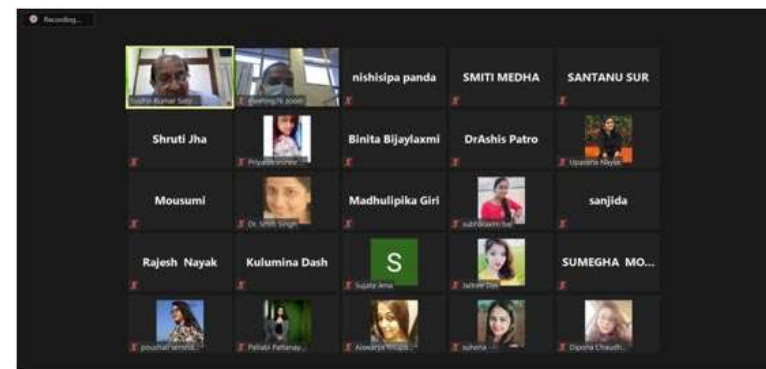
celebrated on 21st June, 2020 through the virtual platform



The Mega Health Camp with free medicine distribution was held in every block headquarters of the four districts- Kandhamal, Boudh, Nayagarh and Ganjam on first Sunday of every month. The programmes have been held in 20 blocks of these districts in first phase. Doctors, specialists and

para-medical staff from KIMS joined the camp and provided health services. Besides, the mega health camps have also been held in district headquarters twice a month. Doctors and specialists with modern medical equipment were available in these health camps.

KIIT School of Yoga organized an exclusive session on Yoga, Meditation and Nutrition: The Key Ingredients for Immunity Enhancement on 24th September 2020. The specific discussion revolved on ‘How to enhance immunity during this pandemic situation, foods that help in enhancing the immune system and impact of yoga and meditation on immunity development’.



✚ School of Public Health conducted a month long Training Programme on “Risk Management and Prevention of Antibiotics Resistance” as a part of the PREVENT IT – consortium consisting of five Indian Universities, four European Universities and two Non-Governmental Organizations (NGOs) supported by the Erasmus+ programme of European Union. The project aims to converge academicians and NGOs to inculcate a sense of awareness towards Antimicrobial Resistance (AMR), judicious use of antimicrobials and the economic/health burden of AMR, among students, academicians, clinicians and population at large, which is aligned with India’s national action plan for AMR.

✚ Five-day Online FDP on ‘Artificial Intelligence’, focusing on ‘AI in Health Dynamics: Conventional Medicare to Intelligent Healthcare’ had been held from 21st to 25th December 2020. As many as 14

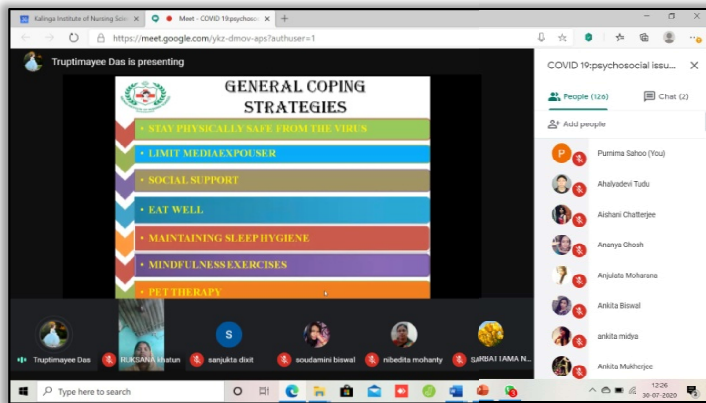
sessions were conducted under the FDP, which contributed to improving research skills of the participants. Eminent speakers from both academics and industry facilitated knowledge to participants who had joined from 20 states of India. The programme centered on numerous topics, including the impact of AI in cardiac healthcare, wearable, medical imaging, reinforcement techniques, and other healthcare analytics. It addressed various challenging issues concerning the healthcare domain and several technically feasible solutions.

✚ Infection Control Week with the theme “Break the chain of Infection” was organized from November 23, 2020 in the virtual mode.

✚ Kalinga Institute of Nursing Sciences organized various Seminars through virtual mode: <https://news.kiit.ac.in/kins/>

■ ‘Prevention of Corona Virus’ on February 2, 2020

- Theme “COVID 19: Psychological Issues and Coping Strategies” on 30th July, 2020 via Google Meet. <https://news.kiit.ac.in/kiitnews/kins-organizes-seminar-on-covid-19-pandemic-psychological-issues-coping-strategies/>



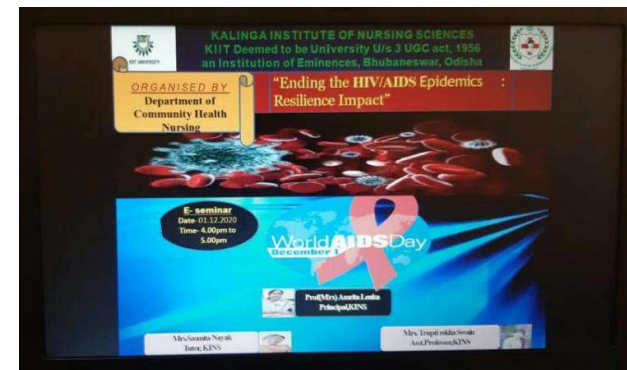
Screenshots from the programme

- Theme “Support Breastfeeding for a Healthier Planet” in the virtual platform on 3rd August, 2020 to Celebrate World Breastfeeding Week–2020. The speakers talked on the topics “Support Breastfeeding

for Healthier Planet”, “Optimizing Nutrition in Preterm Low Birth Infants”, “Supporting Breastfeeding during COVID-19 Pandemic”, “Infant Young Child Feeding”, and “Lactation Management”. <https://news.kiit.ac.in/kins/kins-organizes-national-level-webinar-to-celebrate-world-breastfeeding-week-2020/>

- Infection Control Week with the theme “Break the chain of Infection” was organized from November 23, 2020. <https://news.kiit.ac.in/kiitnews/kims-observes-infection-control-week/>

- “Ending the HIV/AIDS epidemics: Resilience Impact”



on World AIDS Day i.e. December 1, 2020.

- The Department of Oral and Maxillofacial Pathology, KIDS, had prepared its own indigenous Hand Sanitizer with the materials available in the department laboratory.
- Webinar on Mental Health was organised to commemorate the World Mental Health Day on 10th October, 2020. The chief guest of the programme, Dr. Raman Kumar, President Academy of Family Physicians of India, President WONCA and Chief Editor JFMPC explained the importance of mental health and suggested solutions to stay mentally healthy during this Covid-19 pandemic.
<https://news.kiit.ac.in/kims/kids/world-mental-health-day-webinar-by-kids/>
- Oral Health Awareness and Screening Camp was organised at:

- Munda Sahi village, Bhubaneswar. More than 180 people were screened for different oral diseases. They were imparted education on oral health and hygiene maintenance and were also counseled for routine diet.



- Gurudawara Singh Shabha, Kharabela Nagar, Bhubaneswar. A team of Post-Graduate trainees and interns attended the camp under the supervision of the faculty member. Around 100 people were screened for different oral diseases. They were imparted education on Oral Health and Hygiene and were counselled for diet.



Snapshot form the programme

- On the eve of celebration of Mega Naturopathy Camp on 6th March, 2020, a mass yoga session was conducted in collaboration with the Ministry of Ayush, National Institute of Naturopathy, Pune.

<https://kiit.ac.in/event/mega-naturopathy-camp/>



Snapshot form the programme

- ✚ 'Kanya Kiran' program in association with United Nations Women and Kalinga Fellowship is being organised annually. In a mobilization of scale and

spread unheard of before, the program covers all the Panchayats of the State of Odisha in India, spreading awareness on gender equality and social evils of violence against women and girl child among millions of households. Over 3000 staff of the University, particularly women staff was actively involved as coordinators and volunteers. They disseminate the message at household level in villages amid overwhelming response. The Women folk were also made aware of menstrual hygiene, cervical cancer, breast cancer etc.

<https://www.youtube.com/watch?v=RClxQ1414DA>

Sanitizers, masks, sanitary napkins and essential commodities have been distributed among 300,000+ people in the state of Odisha during the times of the Pandemic; Old Age Homes in Jirang have been provided with essential food items and basic

necessities along with masks and sanitizers.

<https://kiit.ac.in/covid-19-news/>

Personal Protective Equipment (PPE) kits have been distributed among 50,000+ health workers.

<https://kiit.ac.in/covid-19-news/>

The members of Khwaab Society celebrated International Women's Day this year with the most graceful ladies of Khandagiri Tapovan, Bhubaneswar where Sanitary Napkins were distributed to more than 60 women and made them aware about how to maintain proper Hygiene and their Health as well.

<https://news.kiit.ac.in/kiitnews/khwaab-society-of-ksac-celebrated-international-womens-day/>

Dedicated website with information on sexual and reproductive health-care advices and services

<https://kiit.ac.in/policies/sexual-and-reproductive-health-care-services/>

✚ Session on Sexual & reproductive health and Women's rights during this Pandemic was conducted as part of webinar series by Kalinga Institute of Nursing Sciences, nursing unit of KIIT to commemorate the 200th Birth Anniversary of Florence Nightingale from 11th to 13th May, 2020.

<https://news.kiit.ac.in/kiit-events/role-of-nurses-in-management-of-covid-19/>

✚ Department of Endocrinology, Metabolism & Diabetology

(<https://kims.kiit.ac.in/departments/endocrinology-diabetology.html>); Department of Obstetrics & Gynaecology;

(<https://kims.kiit.ac.in/departments/obstetrics-and-gynaecology.html>) and Department of Urology

(<https://kims.kiit.ac.in/departments/urology.html>, <http://pbmh.ac.in/super/urology.aspx>), Kalinga Institute of Medical Sciences, the medical unit of KIIT provides free sexual and reproductive health-care services including information and education services.

✚ Awareness programmes on nutrition, sex education, menstruation, reproductive health etc organised on regular basis.

✚ Female doctors visit the hostels every week and provide advice. If any issue observed, the case is referred to specialists for further treatment.

✚ ICMR funded Research Project on “An intervention study to increase male participation in the family welfare program in two districts of Odisha” has been ongoing in the year 2020. The project works on the hypothesis of limited and skewed male participation in making contraceptive choices especially in some districts of Odisha, which are far ahead of the national

permissible Total Fertility Rate of 2.1. The project proposes intensive socio-behavioral intervention in two districts Koraput and Boudh. The study is proposed for a tentative 2 years, subject to extension depending on the programmatic augmentations, if earned from the project and the model may be slated for National Level duplication. The grant is for above 70 lakhs.

🏆 Recognition :

- ◆ Kalinga Institute of Dental Sciences (KIDS), KIIT Deemed to be University was conferred with the prestigious Sushruta Award for Best Dental College of the Year 2020 by International Exemplary Research and Performance Awards.
- ◆ KIIT School of Public Health (KSPH), KIIT Deemed to be University has been accepted as an active member of the South East Asia Public

Health Education Institutions Network (SEAPHEIN) supported by WHO SEARO.

- ◆ KSPH received from SEAPHEIN the “Public Health Education Leadership Award” for significant contribution in promoting Public Health Education at the 9th Biennial SEAPHEIN Meeting in 2019.

🏆 Ongoing Research Projects on SDG 3:

- Determination of Biofilm Pharmacodynamics of newly formulated, nanoconjugated antibiotics to Optimize treatment and dosing of chronic, antibioticresistant biofilm infections
- MultiOmics Analysis to Decipher Mechanisms of Hormone Resistance in Breast Cancer
- Deciphering Osteopontin Driven Regulator(s) of Metastasis in Triple Negative Breast Cancer using Dead Cas9Based Tools

- Service Quality Dimensions :-An Assessment of Government Sponsored Social Programmes
- Exploring The Limitation of Medical Negligence Law with Special Reference to Odisha.
- Socio-Economic and Health Interventions for the Greying Population: An Impact Assessment in the State of Odisha.
- Research on Rheumatoid Arthritis with title 'Identifying Mitochondrial Dysfunction as the regulatory mechanism in progress of Rheumatoid Arthritis and the associated therapeutic opportunities in the Indian case control cohort' in collaboration with SERB
- Research on diseases like cancer, tuberculosis are being carried out in collaboration with government agencies like Board of Research in Nuclear Sciences (BRNS), Science and Engineering Research Board (SERB)
- Development & Characterization of microtumor spheroids for evaluating radiopharmaceuticals
- Development of a potent anti-cervical cancer drug using bioactive small molecule quinacrine Nanoparticle
- Deciphering the Effects of Radiopharmaceuticals on Epigenetic Profile of Colon Cancer”
- Effect of lipoic acid on ionizing radiation-induced TGF beta signaling in breast cancer cells
- Effect of Micro RNA-214 in Modulating Chemo Resistance/Sensitivity in Cervical Cancer
- Quinacrine and Silver based hybrid nanoparticle caused apoptosis in Oral cancer stem cells by inhibiting induction of base excision repair pathway

- Role of Estrogen-related receptor α (ERR α) in epithelial mesenchymal transition and metastasis of breast cancer
- Olaparib (AZD2281) a PARP inhibitor and curcumin synergistically induces apoptosis in oral cancer stem cells by inhibiting the DNA repair cascade
- Validation of anti-cancer activity of Phytochemicals from traditional herbal healing practices
- Analysis of CART Cell therapy as a living drug for the treatment of hematologic cancer
- Multipronged Approach for Clinical Assessment of Novel Curcumin Formulations as Drugs for breast cancer therapy
- Study on estrogen receptor α (ER- α) in breast cancer patients with reference to local population
- ✚ Dedicated website for providing access to mental health support has been designed <https://kiit.ac.in/policies/mental-health-care-services/>
- ✚ A full-fledged Counselling Cell is also functional in the University headed by the Director, Counselling to support students, staff, faculty from underrepresented groups. Detailed information available at <https://kiit.ac.in/student-counselling/>
- ✚ Tele-counseling Cell has been functioning to provide necessary support for stress management and emotional wellness (06747105371) to the all stakeholders of the University including the general public affected by the pandemic.
- ✚ Webinar on Mental Health was organised to commemorate the World Mental Health Day on 10th October, 2020. The chief guest of the programme, Dr. Raman Kumar, President Academy of Family Physicians of India, President WONCA and Chief Editor JFMPC explained the importance of mental

health and suggested solutions to stay mentally healthy during this Covid-19 pandemic.

<https://news.kiit.ac.in/kims/kids/world-mental-health-day-webinar-by-kids/>

- ✚ □ Department of Psychiatry, Kalinga Institute of Medical Sciences, the medical unit of the University provides a comprehensive range of diagnostic and treatment services for patients with Psychiatric and Developmental disorders.

<https://kims.kiit.ac.in/departments/psychiatry.html>

- ✚ In-house Psychologist and Psychiatrist are also available round the clock for counselling and mental health support.

<http://pbmh.ac.in/contentCMSPage.aspx?id=211>

- ✚ Periodic and need based counseling for staff members and students of the University was also provided during the pandemic through online mode.

<https://kiit.ac.in/covid-19-counselling/>

- ✚ Realising that Academics and sports complement each other, from the inception of KIIT we have been giving top priority to sports. As a result, Over 3,71,354 sq. ft. of well-appointed courts, tracks and fields, with World class sports facilities for a wide range of sports including international standard Swimming Pool, Archery Ground, Rugby Ground, Football Ground, Hockey Ground, BCCI approved Cricket Ground and all others. It has been proved successfully by conducting the first-ever Khelo India University Games entirely at KIIT campus very successfully.

4. Overall Impact

Initiatives in 2019 & 2020	Beneficiaries
Patients Treated	1,00,000 +
Number of COVID positive Patients treated	15000+
RT PCR tests conducted	12000+
COVID+ pregnant women successfully discharged	150+
Number of patients treated through Wellness Clinic	2500+
Number of Free beds provided	300+
Number of beds in COVID hospitals	1050+