



DOW UNIVERSITY OF HEALTH SCIENCES, KARACHI

DUHS

**ANNUAL
STANDARDIZED
REPORT**

2019-20

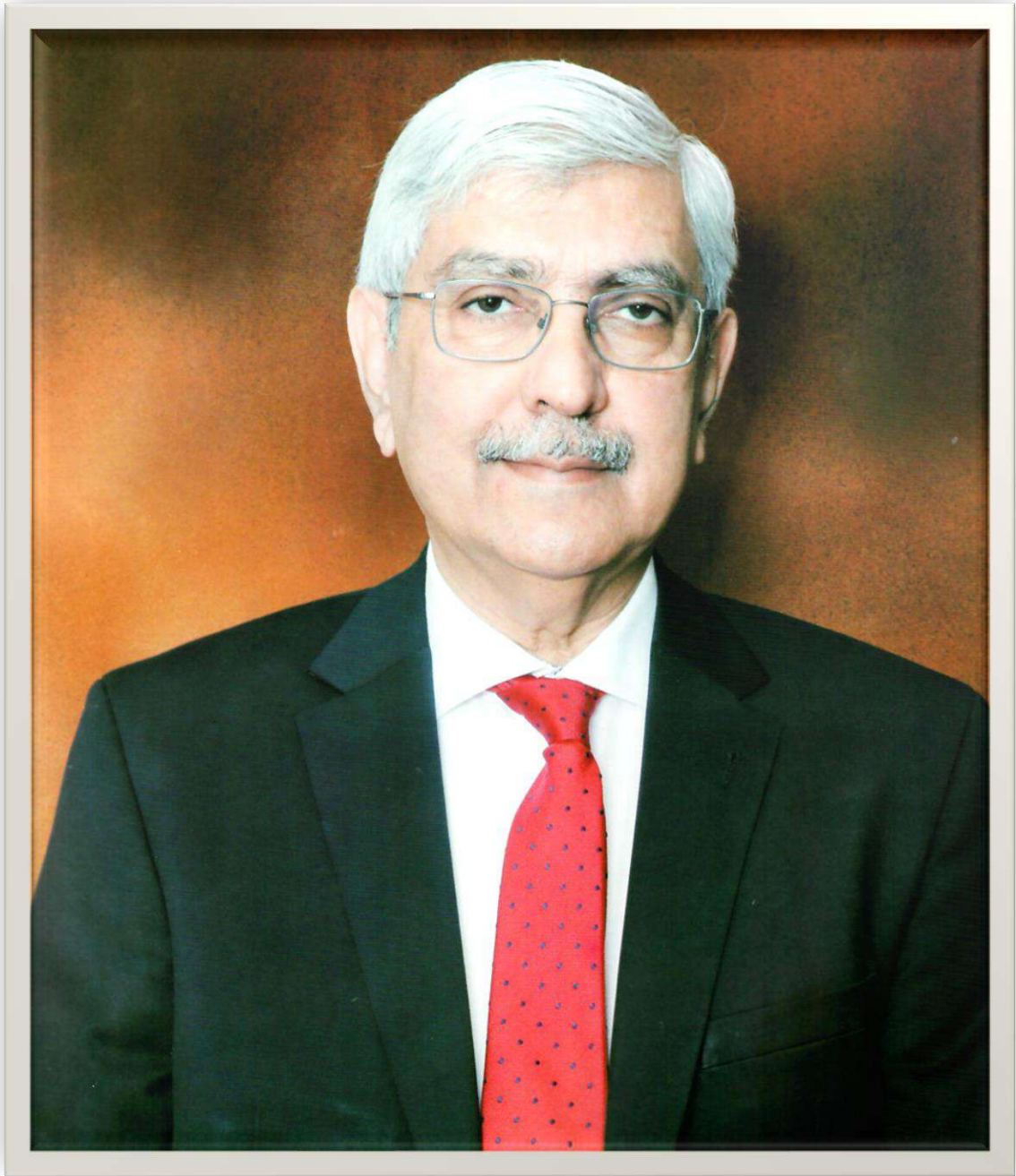


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Prof. Mohammed Saeed Quraishy

VICE CHANCELLOR, DOW UNIVERSITY OF HEALTH SCIENCES

Executive Summary (2019-2020)

Founded in December 2003, the Dow University of Health Sciences (DUHS) has been developing tradition of excellence in education, research and community service. DUHS has educated and trained more than 8,324 students and residents from 49 academic institutes, colleges, and research core and administrative entities. The University currently has more than 4000 employees, including approximately 1076 faculty members as of 2019-2020.

The Dow University of Health Sciences (DUHS) offers a multitude of undergraduate and postgraduate programs that cater to the needs of the medical and allied healthcare sciences. At the global level, the research creates a demarcation between the curricula of undergraduate and post graduate level studies, and DUHS also emphasizes integrating research as a part of the regular curriculum, in addition to community service. The research, when taught to students at the undergraduate and post-graduate levels, develops their habit of learning and acquiring information through primary data sources and to be an active seeker of information and participate in knowledge dissemination, as per the Mission of the University. During 2019, the University initiated collaborations with international universities, global associations, other talented professionals and scholars to enhance the quality of research activities and ultimately, the demand for our graduates worldwide.

In 2019-2020, the focus of the University was on acquiring accreditation from relevant professional councils for all of its existing and newly launched programs, with a strategic aim to enhance employee & staff development and heighten growth of academic and research activities, in order to make an impact in research and other scholarly activities in the world of medicine and the biomedical sciences by the year 2024.

The year 2020 was a dynamic year and the first half of it was dedicated to transitioning the university's primary mode of in-class teaching and learning to online teaching, due to Covid19 circumstances. In this duration, initially 389 out of 415 courses were transitioned online immediately in March and April of 2020; followed by an increased investment in resources allowing the University to teach in hybrid mode, both online and in classroom teaching, for the remaining Covid period. It is of great pride that Dow University of Health Sciences, Karachi was able to adopt policies, SOPs, establish an Online Academic Council, which held its first meeting on April 1st, 2020, 18 days after lockdown, along with being able to operationalize a learning management system, the Dow Online Education System, as early as March 4th, 2020.

Faculty readiness was also a key factor in ensuring successful transition onto online teaching delivery, as faculty were encouraged to take an online introductory course(s) that would successfully teach them varied methods of delivery so as to engage the students in online learning. Furthermore, the University was able to establish a robust evaluation system that was able to eventually assess and evaluate all programs that were transitioned online and the number of students that were evaluated were half as many that were registered during Covid. This ensured the completion of the teaching period during Covid and also prepared the University to be able to offer courses in Hybrid mode, with blended learning opportunities available for the students onwards.

Vision of Dow University of Health Sciences

**“To Be a Pre-Eminent Academic Institution Committed to
Changing and Saving Lives”**

Mission Statement of Dow University of Health Sciences

**“Providing Outstanding Patient Centered Education, Training
and Clinical Care Informed by Cutting Edge Research and
Innovation Generating and Disseminating New Knowledge”**

Diversity Statement

We demonstrate equal employment opportunity without any discrimination to gender and encourage a participative work culture of equality and professionalism in all the endeavors at DUHS, these aspects include, Hiring, Learning & Development, Performance Enhancement etc.

Non-Discrimination Against Women

The scope of non-discrimination with regard to gender on admission of students is covered in The DOW University of Health Science Act 2004 which states in Clause No. 5.1 Under Section University Open to All “ The University shall be open to all persons of either sex of whatever religion, race, creed, color who are academically qualified for admissions to the courses of study offered by the university and no such persona shall be denied to the privilege on the ground of only sex, religion, creed, race, class, color”.

Non-discrimination for transgenders

Section 3(3) of Transgender Persons (Protection of Rights) Act, 2018 states, “every transgender person, being the citizen of Pakistan, who has attained the age of eighteen years shall have the right to let himself or herself registered according to self-perceived gender identity.” Accordingly, DUHS encourages all gender identities to apply for employment as well as admissions to the courses of study offered by the university and no such persona shall be denied to the privilege on this ground.

Colleges, Institutes & Schools of DUHS

Name of Institute/Colleges & Schools of DUHS	
1	Dow Medical College (DMC)
2	Dow Dental College (DDC)
3	Dow International Dental College (DIDC)
4	Dow International Medical College (DIMC)
5	Dr. Ishrat-ul-Ebad Institute of Oral Health Sciences (DIKIOHS)
6	Dow College of Pharmacy (DCOP)
7	Institute of Physical Medicine & Rehabilitation (IPM&R)
8	Dow Institute of Health Professionals Education (DIHPE)
9	Dow Institute of Radiology (DIR)
10	Institute of Nursing & Midwifery (IONM)
11	Institute of Business and Health Management (IBHM)
12	Institute of Medical Technology (IMT)
13	School of Public Health (SPH)
14	Dow College of Bio-Technology (DCOB)
15	School of Post Graduate Studies (SPGS)
	<i>a. Institute of Clinical Sciences</i>
	<i>b. Institute of Biomedical Sciences</i>
	<i>c. Institute of Health Sciences</i>
16	School of Dental Care Professionals
17	Institute of Basic Medical Sciences (IBMS)
18	National Institute of Diabetes & Endocrinology (NIDE)
Clinical Departments of DUHS	
1.	Dow University Hospital
	<i>a. Dow Institute of Cardiology</i>
	<i>b. National Institute of Liver & GI Diseases (NILGID)</i>
	<i>c. Clinical Hematology and Bone Marrow Transplantation</i>
	<i>d. National Institute of Diabetes & Endocrinology (NIDE)</i>
	<i>e. National Institute of Solid Organ & Tissue Transplant (NISOTT)</i>
2.	Dow Institute of Radiology

3.	Dow Diagnostic, Research and Reference Laboratory (DDRRL)
4.	OJHA Institute of Chest Diseases (OICD)
5.	Institute of Physical Medicine and Rehabilitation (IPM&R)
6.	Dr. Ishrat UI Ebad Khan Location (near LNH), National Stadium Road
7.	Dr. Ishrat UI Ebad Khan Institute of Blood Diseases (DIKIBD)
8.	DHA City Medical Center
Other Non-Academic, Research Core and Administrative Entities	
1.	Day Care Centers
2.	Reading Libraries
3.	Finance Directorate <i>a. Financial Aid Office</i>
4.	Office of Registrar <i>a. Establishment</i> <i>b. Legal Section</i> <i>c. Transport Section</i>
5.	Clinical Trials Unit (CTU)
6.	Internal Audit Directorate
7.	Advanced Animal Laboratory
8.	Examination Department
9.	Question Bank (Q Bank)
10.	Admissions Department
11.	Student Facilitation Centers
12.	Quality Enhancement Cell (QEC)
13.	Directorate of Human Resources <i>a. Payroll section</i> <i>b. Health Insurance Section</i> <i>c. Contract section</i>
14.	Professional Development Center (PDC)
15.	Planning and Development Directorate
16.	Dow Premium Health Water- Riva Water
17.	Office of Student Counseling and Advising
18.	Office of Alumni Affairs and Resource Mobilization
19.	Office of Research Innovation & Commercialization (ORIC)

20.	Office of Strategic Development and Implementation (OSDI)
21.	Office of Graduate Placement and Student Exchange Program
22.	Directorate of Information & Communication Technology (ICT) <i>a. Campus Management Solution (CMS)</i> <i>b. Dow Vocational Technical Training Centre (DVTTC)</i> <i>c. Digital Libraries (Multiple Departmental Libraries) of DUHS</i>
23.	Institute of Biological, Biochemical and Pharmaceutical Sciences
24.	Procurement Directorate (Office of Procurement and Supply Chain)
25.	Dow Research Institute of Bio-Technology & Bio-Medical Sciences (DRIBBS)

Brief Profiles of Institutes, Colleges & Schools

i. Dow Medical College (DMC)

Dow Medical College (DMC) is one of the oldest medical colleges in Sindh. Established in 1945, it has a rich history and has been involved in the teaching and training of medical students since the establishment of the college. For more than 60 years, the college has approximately seventeen thousand alumni, who are serving with distinction globally. It is attached to Dr. Ruth Phau Civil Hospital Karachi, Pakistan's largest teaching hospital with departments of all major specialties, and more than 2000 bed occupancy.

The five years course has been divided into 10 semesters. A new system of integrated teaching comprising of applied knowledge has been introduced, in which the students are taught basic subjects in the usual manner, which is later on followed by clinically oriented teaching sessions to explain the clinical application of the basic knowledge spiral after spiral, with enhanced integration of concepts.

ii. Dow International Medical College (DIMC)

Dow International Medical College was established in 2007 in order to facilitate children of overseas Pakistanis as they face various difficulties in entering into medical profession abroad. It is a PMC recognized medical college that has been recognized internationally, and included in INTERNATIONAL MEDICAL EDUCATION DIRECTORY (IMED), with approval from the Educational Commission for Foreign Medical Graduates. The laboratories of the college are fully equipped with the latest equipment, including power labs, lecture halls, tutorial rooms and other basic facilities. A state of the art gymnasium and sports and recreational complex also hosts extra-curricular activities for the students. Separate hostels for boys and girls are available, along within the same campus with a regularly monitored security system. Clinical training for the MBBS program of DIMC is provided in the 650-bedded Dow University Hospital, located within the vicinity of the same campus.

iii. Dow College of Pharmacy (DCOP)

Dow College of Pharmacy (DCOP) was established in 2007, and it is recognized and accredited by the Pharmacy Council of Pakistan. Dow College of Pharmacy provides pharmacy education to its students, offering graduate and post-graduate degree programs in the field of pharmacy:

- I. Pharm D (Morning and Evening) - A Five years Program for degree of Doctor of Pharmacy.*
- II. Master Philosophy in various disciplines, as approved by Pakistan Pharmacy Council.*

Dow College of pharmacy is a leading institute in training of the allied healthcare professionals who are able to conduct innovative research, provide quality pharmaceutical care and consultancies, along with being at the forefront in formulating pharmaceutical products.

The college is well equipped with audiovisual enabled lecture halls, fully equipped laboratories for Pharmaceutics, Pharmacology, Pharmaceutical Chemistry, Pharmacognosy, Industrial Pharmacy, Quality Assurance, Instrumentation, Anatomy, Physiology and Pathology, Microbiology.

iv. Dow International Dental College (DIDC)

Dow International Dental College (DIDC) was initially established at OJHA Campus. Later it was relocated at Chanesar Goth (Defence Campus) to meet deficiency of Dental Surgeons in Pakistan as well as abroad. DIDC offers admissions mainly to overseas students, however due to acute deficiency of Dental Surgeons; the option for admission is also given to local students.

Pakistan Medical Commission (PMC) has recognized this college in 2011 for Students in Dentistry Program (BDS). This college is fully equipped with most modern facilities including Digital library, Museum, Lecture halls, Tutorial Rooms and Laboratories.

v. Dow Dental College (DDC)

Dow Dental College (DDC) was established in November 2012 at Dow Medical College (DMC). The College's new building was inaugurated in April 2018 and is under consideration for recognition and registration with PMDC for BDS (4 year) program.

DDC is working to prepare competent and professional dentists in the existing oral health care educational and patient management system in Pakistan and outside the country with a focus to serve community and research and to develop academic excellence and to deliver the utmost quality of scientifically proven preventive, educational and therapeutic services to the community.

This college and its dental hospital are fully equipped with most modern equipment in the laboratories along with simulators to teach clinical procedures at pre-clinical & clinical level. It has highly qualified and experienced faculty who carry out all dental procedures ranging from simple diagnostic procedures to extractions and implant placements.

vi. Dow Institute of Nursing & Midwifery (DION&M)

Institute of Nursing was established in June, 2006 with the help of Higher Education Commission (HEC) Pakistan. It is envisioned to promote nursing education in Pakistan, preparing the leaders in the nursing and producing a sufficient number of highly skilled and trained nursing professionals who can meet the challenges of modern preventive and curative healthcare.

The Institute of Nursing has a state-of-art building and all the modern facilities of teaching and learning. Both undergraduate and post-graduate programs are offered at Institute of Nursing. For nearly 15 years, the Institute has helped prepare qualified professional nurses to work as highly skilled nursing staff, competent teachers and leaders in public and private health care sectors.

The Institute of Nursing represents a strong and extraordinary community of excellent students, well trained faculty, dedicated staff, and supportive alumni.

All programs, which are offered at Institute of Nursing are accredited by Pakistan Nursing Council (PNC) and Higher Education Commission (HEC), Pakistan.

vii. Dr. Ishrat-ul-Ibad Khan Institute of Oral Health Sciences (DIKIOHS)

Dr. Ishrat ul Ebad Khan Institute of Oral Health Sciences (DIKIOHS) is offering the following programs:

- *Bachelor in Dental Surgery (BDS)*
- *Bachelor in Dental Care Professionals (DCP)*
- *Masters in Dental Surgery (MDS)*
- *Masters in Sciences (MSc)*

The Dental College for imparting under-graduate dental education leading to the degree of Bachelor of Dental Surgery (BDS), fulfilling the requirements of the Pakistan Medical Commission (PMC). Training in all Basic and Clinical Dental sciences, and Community Dental Health is provided under the Semester System. Currently there are departments of Oral & Maxillofacial Surgery, Prosthodontics, Oral Pathology & Oral Microbiology, Oral Medicine, Periodontology, Oral Biology and Tooth Morphology, Sciences of Dental Materials, and Community Dentistry. The attached Dental Hospital with 125 dental chairs has Nine Out-patient Departments, namely Oral Diagnosis, Oral Surgery, Oral Medicine, Oral Radiology, Periodontology, Prosthodontics, Crown & Bridge, Orthodontics and Operative Dentistry, Procedures including extraction of teeth, filling, root canal, capping and emergency oral treatment is offered.

The clinical work at the hospital is augmented by best practices, good sterilization protocols and required gadgetry. All its departments are provided with material and equipment, which are further provided to patients at minimum cost. At the post Graduate Training and Research Centre of DIKIOHS, fellowship (FCPS) Part II training is underway at the Departments of Orthodontics, Prosthodontics, and Oral Surgery, after being recognized by College of Physicians & Surgeon (CPSP).

viii. Institute of Business and Health Management (IBHM)

Institute of Business and Health Management is a constituent part of Dow University of Health Sciences and was established in 2007 to offer programs in Healthcare Management. The institute was established with the aim of creating an environment that facilitates learning and innovation, to bridge the gap between academia and healthcare industry, and to provide quality management graduates to contribute to the healthcare workforce. In order to meet objectives of providing quality health managers, IBHM is offering programs at the undergraduate level, with a Bachelors of Business Administration- BBA, along with a Masters of Business Administration - MBA (Regular) & Executive Masters of Business Administration- (EMBA).

ix. Institute of Medical Technology (IMT)

Medical Technologists are recognized globally as important and essential members of the health care team, not only for routine medical and surgical care but also for emergency medicine, critical care and management of disaster victims. The Institute of Medical Technology of Dow University was established for Human resource development in these key areas, with a four years' degree program in the following specialties:

- *Clinical Pathology*
- *Critical Care Technology*
- *Operation Theatre Technology*
- *Ophthalmology*
- *Perfusion Sciences*

It has eight semesters over four years and comprises of a core course where training is imparted in Basic Computer Skills, English proficiency, Behavioral Sciences, Research Methodology and Fundamentals of Basic Medical Sciences. The Institute has its own state of the art Skills Laboratory and a 26 station Digital library with Internet and PERN connectivity. Practical classes are held in well-equipped Science laboratories.

Additional training programs at Institute of Medical Technology include:

- *Adult Echocardiography / vascular technician course*
- *Cardiac technologist training program*
- *Electrocardiography training program*
- *Technician courses for ultrasound, radiography, CT scan and MRI*

x. Institute of Physical Medicine and Rehabilitation (IPM&R)

Institute of Physical Medicine and Rehabilitation was established in August 2007 and since then it is making a difference in the lives of people with disabilities through multidisciplinary Rehabilitative care to restore fullest possible, physical, mental, social and economic independence. It is one of the only civilian facilities in Pakistan providing such multi-disciplinary rehabilitative care.

IPM&R is committed to provide comprehensive multidisciplinary rehabilitation services and evidence-based practice to help the patients return to an active and healthy lifestyle. IPM&R is dedicated to being an internationally significant rehabilitation institute in the promotion, development and dissemination of research and education in the science of Rehabilitation through its activities and partnerships with internal and external communities.

xi. Department of Post Graduate Studies (DPGS)

The postgraduate education in Dow University of Health Sciences is conducted under the overall supervision of Department of Post Graduate Studies. The University bodies such as Board of Advanced Studies and Research, Institutional (ethical) Review Board and Scientific Committee facilitates monitors both the research activity and the overall programs.

Dow University conducts 35 Ph.D., Masters, Fellowship, Diploma and Certificate programs. Each year around 150 FCPS students, complete training form Dow University of Health Sciences. Till date, more than 150 candidates have passed M.Phil. MDS, MSBE, MS diabetes, MS Physiotherapy and obtained MBAs from Dow University of Health Sciences.

xii. Institute of Bio- Medical Sciences (IBMS)

Institute of Basic Medical Sciences (IBMS) has been established for M.Phil. and PhD courses in Basic Sciences i.e. Anatomy, Physiology, Biochemistry, Pathology, Microbiology and Pharmacology to develop human resources. It is a part of medical research city at OJHA Campus. The building has spacious air-conditioned lecture halls and seminar rooms having necessary audiovisual multimedia facilities.

The contemporary techniques involved in basic sciences research activities is conducted in the labs of different departments, which are well equipped with modern equipment for variety of anatomical, physiological, biochemical, hematological, pathological, pharmacological, immunological and molecular biological experiments for specific research. The curriculum has been designed with multidisciplinary approach, focusing at molecular and cellular level. In addition, core and supportive courses provide competencies in research Biostatistics, critical analysis, and interpersonal communication. This institute is helping in bridging the deficiency gap of Basic Medical Sciences research in Pakistan.

xiii. School of Public Health (SPH)

Public Health is an important component of health services that is often ignored in the developing world and highly emphasized in the developed world. Keeping in view the needs of Pakistani population, the DUHS took this initiative to establish the first public health school in a public sector university of the Sindh Province.

Dow University of Health Sciences established the School of Public Health (SPH) at OJHA campus in 2012. The aim of this school is to improve the health of our population by addressing the major health issues. The programs at SPH include Master of Public Health, Master of Sciences (Biostatistics and Epidemiology), and Master of Sciences in Public Health. Pakistan Medical Commission (PMC) has approved all of these programs.

The faculty and students of SPH are also conducting community based research and health activities. The SPH has various sections to focus separately such as epidemiology division (examining communicable and non-communicable diseases in Pakistani population), nutrition division (studying the role of nutrition in disease development and prognosis) and economic and policy group (examining the impact of economic indicators on health of Pakistani population and health policy).

xiv. National Institute of Diabetes and Endocrinology (NIDE)

It was established in 2006. It provides consultation and counseling of patients suffering from Diabetes and other Endocrine diseases. This institute is offering a two-year Master's program in Diabetes & Endocrinology. This institute is also conducting public awareness programs regularly as the prevalence of diabetes and endocrine diseases are on the rise in Pakistan, in particular Sindh. This institute also has facilities for management and treatment of eye complications of diabetes through its Eye Care Center, which offers the patients:

- Complete Eye Examinations
- Screening for Diabetic Retinopathy

- Fundus Fluorescein Angiography
- Laser photocoagulation

More than 5000 patients have been registered. A comprehensive facility for diabetic diet consultation, foot care, early diagnosis and treatment-based facilities for other endocrine diseases, especially thyroid diseases, growth disorders and obesity, is also offered to the patients.

xv. Dow Institute of Radiology

The Dow Radiology Complex was established in 2008 to have the highest quality medical imaging, research opportunities, and Radiology educational experiences. Besides providing economic benefits to the patients, the department of Imaging Services is committed to be at the forefront of new developments and clinical applications in the rapidly changing field of medical imaging.

Services include the provision of all modern diagnostic facilities such as

- X-ray
- Ultrasound Grayscale and color Doppler machines
- Fluoroscopy
- DEXA Scan
- Echocardiography
- Mammography and breast interventions
- CT Scan 128 and 16 slicers
- MRI open magnets and 1.5 magnets
- VIR vascular and interventional radiology.
- OPG

Considering the growing demands of patients, a City Campus on Stadium Road has been established, named as 'Dow LEJ Campus' and it provides facilities of CT & MRI also, 24 hours a day. Malir Chest Clinic, Nazimabad Chest Clinic and DHA City Centre were also established to facilitate the society. Highly qualified and experienced faculty, staff, and technologists perform all the teachings and services at Dow Institute of Radiology.

xvi. Dow Institute of Health Professionals Education (DIHPE)

The Dow Institute of Health Professionals Education (DIHPE) is the first health professional education Institute of the country. The basic idea behind its establishment is to restructure, organize and optimize the existing professional education activities of the region.

The foundation of Dow Institute of Medical Education is based on the four pillars of Medical Education: Teaching & Learning, Principles of Assessment, Curriculum Development & Innovation and Research. Additionally, we oversee the conduct of various types of Continuing Professional Development short courses ranging from one-day to five-day courses, and even up to six months Certificate course (CHPE) that is compulsory for all the faculty members of Dow University of Health Sciences (DUHS). The Institute is offering Masters in Health Professions Education Program (MHPE) since 2009. This Program is the first MHPE program of

the country. The graduates are currently serving on the key posts in the renowned universities of the country as well as in different parts of the world.

Dow Institute of Health Professional Education (DIHPE) is acting as a nucleus for DUHS in teaching, scholarship, development and evaluation of educational programs through service provision research and innovation. The scope of its activities includes postgraduate education, continuing professional development and continuing medical education.

xvii. Dow College of Biotechnology (DCOB)

The Dow College of Biotechnology is located in the graceful building of Dow International Medical College, OJHA Campus. Currently, a four-year BS Biotechnology program is offered through Dow College of Biotechnology. The College has an excellent teaching faculty, comprising of foreign and nationally qualified PhD. scientists, who are extensively involved in research activities and hence are well aware of the recent developments in the field of sciences. Teaching methodology at Dow College of biotechnology is a well-planned blend of theory and practical skills learned in laboratories; therefore, this program is for students who have a passion for becoming scientists. For those students, Dow College of Biotechnology can provide an excellent platform. The college offers the students diverse experiences and expertise, comprising of a quality educational environment that emphasizes learning through integration of theory with practical laboratory and field studies. Our program offers the students the opportunity to work on research projects that provide valuable insight and impact people's lives.

xviii. Dow School of Biomedical Engineering and Technology (DSBMET)

The Dow School of Biomedical Engineering and Technology is a driving force in creating engineering knowledge and novel biomedical technology that improve the human care through the advancement of clinical care and biomedical sciences.

We work closely with medical researchers to identify important problems that impact human health and solve them using our technical expertise. We engage motivated and talented students in the classroom, laboratory and clinic, imparting to them the spirit of our mission as we prepare them for future careers as effective, knowledgeable, and ethical leaders in corporate, professional, and academic communities.

We seek to prepare our students for skilled and ethical service to their communities by creating a free and open learning environment that fosters their intellectual growth, advance the frontiers of scientific inquiry and contribute with distinction to the international community for scholarship and service.

xix. School of Dental Care Professional (SDCP)

School of Dental Care Professionals of Dow University aims to produce Dental Technologists, Hygienists and other Dental Auxiliaries to meet the demands of new and more sophisticated Dental Care system in Pakistan, in addition to providing a trained workforce to an ever-increasing need for qualified Para-medical staff. Currently, 9 Dental Surgeons. Nine Batches of School of Dental Care Professionals have graduated since 2007.



DOW UNIVERSITY OF HEALTH SCIENCES, KARACHI

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CHAPTER 1

**Academic
Activities**

1.1 UNDERGRADUATE & POSTGRADUATE PROGRAMS

UNDERGRADUATE PROGRAMS:

1. Bachelor of Medicine & Bachelor of Surgery (MBBS)
2. Doctor of Physiotherapy (DPT)
3. Pharm-D (Doctor of Pharmacy)
4. Bachelor in Dental Surgery (BDS)
5. BS Optometry
6. BS-Radiology
7. Post RN. Nursing
8. BS Biotechnology
9. Post RN BS Midwifery
10. BS Nutritional Sciences
11. BS Medical Technology
12. BS Occupational Therapy
13. BS Prosthetics & Orthotics
14. BS Generic Nursing (BSN)
15. Bachelors of Business Administration (BBA)
16. BS in Dental Care Professional (DCP) Dental Hygiene
17. BS in Dental Care Professional (DCP) Dental Technology

Postgraduate Programs:

1. Masters In Dental Surgery (MDS-Basic &Clinical)

A 4-Years Program in the following Specialties of **Basic Sciences**

- I. Dental Materials
- II. Oral Pathology
- III. Community Dentistry
- IV. Oral Biology

A 4-Years Program in the following Specialties of **Clinical Sciences**

- I. Operative Dentistry
- II. Oral Surgery
- III. Prosthodontics
- IV. Orthodontics

2. Masters In Sciences Dental Surgery (MSc. DS -Basic &Clinical)

A 2 year program in the following specialties of **Basic Sciences**

- I. Community Dentistry
- II. Dental Materials
- III. Oral Biology
- IV. Oral Pathology

A 2-year program in the following specialties of **Clinical Sciences**

- I. Prosthodontics
- II. Periodontics
- III. Oral Medicine
- IV. Operative Dentistry
- V. Oral & maxillofacial Surgery

3. Masters In Biostatistics And Epidemiology (MSBE)

4. Masters in Health Professionals Education (MHPE)

5. Masters in Advanced Physiotherapy (MSAPT)

6. Masters In Nursing (MSN)

7. Masters in Public Health (MPH)

8. Masters of Business Administration (MBA)

9. Master of Science in Public Health (disciplines/specialties offered in):

- I. Social & Behavioral Sciences
- II. Health Policy and Management
- III. Nutritional Sciences

10. Clinical Diploma Programs

- I. Diploma in Anesthesiology (DA)
- II. Diploma in Ophthalmology (DO)
- III. Diploma in Psychiatric Medicine (DPM)
- IV. Diploma in Laryngo Otorhinology (DLO)
- V. Diploma in Family Medicine (DFM)
- VI. Diploma in Medical Jurisprudence (DMJ)
- VII. Diploma in Cardiology (Dip-Card)
- VIII. Diploma in Critical Care Medicine (DCCM)
- IX. Diploma in Child Health (DCH)
- X. Diploma in Dermatology (D-DERM)
- XI. Diploma in Radiology (DMRD)
- XII. Diploma in Tuberculosis & Chest Diseases (DTCD)

11. FCPS-II

Fellowship training (4-Years Program), Degree awarded by CPSP

Fellowship Training Programs		
Ent	Medicine	Radiology
Peads	Psychiatry	Orthodontics
Gynae	Orthopedic	Anesthesiology
Surgery	Pulmonology	Ophthalmology
Oral Surgery	Dermatology	Operative Dentistry
Neurology	Prosthodontics	Community Medicine
Cardiology	Cardiac Surgery	Physical Medicine and Rehabilitation

12. MS/MD- Masters of Surgery & Doctor of Medicine Program

Doctor of Medicine Program Specialties (4-5 years programs)

Doctor of Medicine Program Specialties		
Pediatric	Anesthesiology	Dermatology
Neurology	Gastroenterology	Pulmonology
Psychiatry	Sports Medicine	Community Medicine
Radiology	Internal Medicine	Critical Care Medicine
Cardiology Family Medicine		

Master of Surgery Program Specialties

ENT	Cardiac Surgery	General Surgery	Orthopedics Surgery
Gynae & Obs.	Plastic Surgery	Pediatric Surgery	Ophthalmology
Neurosurgery			

1.2 MS/M.Phil. and Ph.D. Programs

M. Phil in Basic Sciences offered in the following specialties:

Anatomy	Bio-Technology	Hematology
Physiology	Histopathology	Molecular Pathology
Bio-Chemistry	Medical genetics	Pharmacology
Microbiology	Molecular Biology	Chemical Pathology
Molecular Medicine & Bioinformatics		
M. Phil in Pharmaceutical Sciences, in the specialty of Pharmacology		

- **Ph.D.** offered in the following disciplines (with specialties)

Ph.D. in Dental Sciences
Ph.D. in Clinical Sciences
Ph.D. in Basic Sciences
Ph.D. in Public Health

- **Ph.D. program (sub-specialty wise)** with current active enrollment:

Anatomy	Pharmacology	Chemical Pathology
Physiology	Ophthalmology	Community Dentistry
Oral Biology	Histopathology	Gynae & Obs
Oral Surgery	Oral Pathology	Medical Microbiology

- **Ph.D.** programs advertised (HEC approved & Accreditation Council approved programs) in **2019-2020**

Ph.D. programs advertised in the Academic Session 2019-2020	
Biotechnology	Genetics
Microbiology	Biochemistry
Pharmacology	

1.3 Academic Achievements

In the year 2019 - 2020, 1312 students have passed out from various undergraduate and postgraduate programs.

Total Passed out Students in Undergraduate Courses

S.No	Course Title	No. of Students
1.	MBBS	466
2.	BDS	185
3.	Pham-D	119
4.	DPT	107
5.	BS MT	75
6.	BS OT	24
7.	BS DCP	5
8.	BS Nursing (Generic)	27
9.	Post RN Nursing	27
10.	BBA	31
11.	BS Radiology	14
12.	AAS	01
13.	BS Nutrition	22
14.	BS Biotechnology	68
Total Undergraduate Candidates		1,171

Total Passed out Students in Postgraduate Courses

S.No	Course Title	No. of Students
1.	MS APT	05
2.	MPH	12
3.	MPhil	17
4.	MS BE	03
5.	MSc. D&E	15
6.	MS Nursing	27
7.	MS PH	04

8.	MDS	03
9.	MSc. DS	12
10.	MBA	07
11.	EMBA	06
12.	MHPE	02
13.	Ph.D.	01
Total Postgraduate Candidates		114

Total Passed out Students in Diploma Courses

S.No	Course Title	No. of Students
1.	Medical Jurisprudence	01
2.	D. Derm	13
3.	DMRD	08
4.	Family Medicine	02
5.	Critical Care Medicine	01
6.	Tuberculosis and Chest Diseases	02
Sub. Total Diploma (C)		27

1.	Sub. Total Undergraduate (A)	1171
2.	Sub. Total Postgraduate (B)	114
3.	Sub. Total Diploma (C)	27
Grand total (A+B+C)		1,312
		Total Graduated Students

Research Achievements

- 6 research projects grants were newly acquired in 2020 with funding of greater than 21 Million Rupees.
- The research publication for the years 2019 and 2020 were 285.

1.4 Foreign Academic Linkages

For the year 2019-20, academic linkages were continued or established with the foreign medical boards/associations/universities, including the following:

• Manchester University, Manchester United Kingdom
• Stem Cell Medical University, California, USA
• Vanderbilt University, USA
• Reliance Medical Clinics, PLLC – Medical Student Exchange, USA
• Duke University Health System, Inc & University of New Mexico, UK
• DOGANA (Dow Graduate Association of North America)
• AMRCB for Accreditation Fee
• University Sultan Zainal Abidin, Malaysia
• University of Maryland Medical Centre (UMMC), USA
• International Committee of the Red Cross (ICRC), Geneva, Switzerland
• Florida International University - Herbert Wertheim College of Medicine (FIU-COM)
• The University of Huddersfield

1.5 Honors and Awards

Research Grants Awarded by HEC (awarded to Dr. Shukat Ali)

- IVIG production from convalescent plasma of COVID-19 survivors: a low risk, high efficiency passive immunization strategy against SARS-CoV-2. (Rapid Research Grant, Higher Education Commission-World Bank Group Approved project), April 2020

Clinical trials Approved:

- Immunoglobulin therapy for Passive Immunization of critically ill COVID-19 patients (COVID-7) by National Bioethics Committee (Ref: No.4-87/NBC-471 COVID-19-07/20/) April 2020.
- Immunoglobulin therapy for passive immunization of critically ill (COVID-19) patients by Drug Regulatory Authority Pakistan (F.No.16-10/2020 DD (PS) May 2020.

1.6 Institutional Linkages

Academics – for the purpose of post graduate trainings, we are linked with the following organizations:

1.6 Institutional Linkages
• Martin Dow Limited
• Patel Hospital, Karachi
• Karachi Adventist Hospital
• Tabbha Heart Institute, Karachi
• Darul-Sehat Hospital, Karachi
• Aga Khan University, Karachi
• Institute of Business Administration (IBA, Karachi)
• Chandka Medical College, Larkana
• Jinnah Post Graduate Medical Center, Karachi
• Ghulam Muhammad Mehr Medical College, Sukkur
• Pakistan Standard Quality Control Authority (PSQCA)
• Pakistan Council for Scientific And Industrial Research (PCSIR)
• Educational Commission for Foreign Medical Graduates (ECFMG)
• Executive Membership from Sindh Province In Scaling Up Nutrition Academia & Research (SUNAR)
• Post-Graduation Diploma & training programs of PIQC Institute of Quality
• Foundation for the Advancement of International Medical Education and Research (FAIMER)
• Toastmasters Club

Educational visits:

• Karachi Medical and Dental College Karachi
• Hamdard Medical University, Karachi
• Sir Syed Medical College Karachi
• Liaquat College of Medicine and Dentistry Karachi
• Dr. Abdul Wahab Dogar and Associates (AWD Associates), Lahore
• Combined Military Hospital, Malir Cantonment Karachi

Research Work Collaborations with:

- Pakistan Chest Society
- Aga Khan University, Karachi
- National TB Control Program
- World Health Organization (WHO)



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CHAPTER 2

**Research and
Development**

2.1 Research & Development – An Overview

The establishment of Department of Research took place with the inception of Dow University of Health Sciences. Since then, the Research Department is providing its services to enhance university position in research, training and consultation areas.

I. **Postgraduate Synopsis and Thesis Review**

A. Scientific Research Committee

This committee was formed in November, 2012 with the approval of Board of Advanced Studies and Research of DUHS. The committee consisted of faculty of DUHS from various fields. In this committee, research proposals of postgraduate students are scientifically reviewed and advised the modifications to the students.

B. Ph.D. Advisory Committee

The purpose of this committee is to evaluate synopses submitted by PhD students. The committee comprises of indigenous experts from different fields. In this committee, research synopses of doctorate students are scientifically reviewed and advised the modifications to the students.

C. Institutional Review Board (IRB)

Department also administered and organized meetings of Institutional Review Board of DUHS which consists of 14 members from different specialty such as medicines, law, religious scholar, ethics, social work etc. It reviews and approves research proposals conducted by DUHS. Besides, DUHS offers this service to those institutes who have not their own IRB/ERB.

D. Board of Advanced Studies and Research (BASR)

All the official works related to this Board are administered and organized under Research Department. The Board consists of 13 members under the Chairmanship of the Vice Chancellor.

The functions of this board are:

1.	To advise authorities on all matters connected with the promotion of Advanced Studies and Research in university
2.	To propose regulations regarding the award of research degrees.
3.	To appoint supervisors for research students to determine the subject of their thesis.
4.	To recommend panels of names of paper setters and examiners for research examination after considering the proposals of Board of Studies in this behalf
5.	To perform such other functions as may be prescribed by the statutes.
6.	Furthermore, the Board also gives final approval for the synopsis.

II. Academic Research Activities

- A. Undergraduate Students Research Activities:** *A research component was also incorporated in MBBS curriculum of DUHS five years ago. Each clinical group works under a faculty member of DUHS.*
- B. Postgraduate Programs:** Research Department is running a postgraduate level program, Master of Science in Biostatistics and Epidemiology (MSBE). MSBE program was started in October 2008. This is a two years program comprises of four semesters with a research thesis work in second year of the program.
- C. Summer Short Courses:** Department has initiated three months summer short courses last year. The courses on Applied Biostatistics, Fundamental Epidemiology, Statistical software, ENDNNote, helpful in health sciences research are taught from June to August.
- D. Training on Biostatistics and Research Methodology:** The department also facilitates training on specific topics of biostatistics and research methodology. Several workshops have been conducted by the faculty of Research Department on the same.
- E. Foreign Scholarship Program:** Foreign Scholarship program is funded by Higher Education Commission (HEC) of Pakistan. Twenty scholars were sent for PhD program at overseas universities. Fifteen scholars enrolled in United Kingdom's universities and one each in Australia, Canada, Sweden, Scotland and Germany. These scholars were selected after through screening by Graduate Assessment Test (GAT), subject and protocol writing tests and then following by two interviews based on candidate's research interest and specialty. Eighteen scholars have successfully completed their PhD program and joined the DUHS back.
- F. Research and Biostatistical Consultation:** The faculty of Research Department also provides research and bio-statistical consultation not only to faculty and students but also to pharmaceutical industries till now. The consultation is classified following three major parts H.
- G. Statistical Consultation:** Department consults all kind of statistical works to different academic and research based organizations including pharmaceutical industries. These services include, but not limited to, sample size calculation, data entry, data analysis and formatted table & graph of the output of the analyses.
- H. Research Writing Consultation:** Department also provides consultation in writing analysis and result sections of the research project/report. Besides, investigators who wants to write by themselves, department guides them how to interpret the statistical results.
- I. Research Protocol Review Guidelines:** The faculty also assists research student and faculty about the processes of research work and writing including questionnaire formatting, structure of protocol, literature review and consent form.

III. Other Research Related Activities: Research Posters Competition

Each year, research department celebrates Faculty and Student Research Days. On these days, researches of faculty and students are displayed through posters. The best three researches present their works orally are awarded.

1. **Researchers at Dow University Of Health Sciences Successfully Develop A Common Fruit Fly Model Of Cyclopia — A Rare Birth Defect In Newborns.** --- Dr. *Mushtaq Hussain is Assistant Professor and Vice Principal, Dow College of Biotechnology and Head, Laboratory of Bioinformatics & Molecular Biology. Research in his laboratory is funded by European Society for Evolutionary Biology, Higher Education Commission of Pakistan and by the Vice Chancellor's Seed Funding Initiative, DUHS.*
2. **1st Position Best Research Poster at the 5th Annual Neuro-Science Conference -2019 at AKU** is awarded to students *Ms. Qurat ul Ail (MPhil) as part of NRPU Grant Awarded to Dr. Farina, faculty of DUHS. This was an exemplary utilization of NRPU grant.*
3. **1st Position Best Researcher Poster Presentation at the 17th Pakistan endocrine Society Meeting presented to Dr. Tooba Noor (MPhil Student),** held at PC, Karachi on 16-17th Nov. 2019. The student was also awarded a cash prize and the conference was attended by over 700 national and international participants. The student was working under the supervision of Dr. Farina Hanif, Ph.D Molecular Medicine, and Assistant Professor Pathology, DIMC.

IV. Journal of the Dow University of Health Sciences

The journal of the Dow University of Health Sciences (JDUHS) (Print ISSN: 1995-2198 and Online ISSN: 2410-2180) was established in 2007, with the aim to disseminate the high-quality scientific research papers among the healthcare research community. The journal is published three times a year, in April, August, and December. The Journal of the Dow University of Health Sciences (JDUHS) is a double-blind peer-reviewed open access health sciences journal, aims to provide valuable knowledge and understanding of health problems and their solutions to basic and clinical scientists, and allied health sciences researchers. The journal has a special emphasis on primary research conducted in the field of health sciences in low and middle-income countries and considers original articles, review articles, short communications, case reports, commentary, and student articles on all aspects of health sciences.

The JDUHS is approved by Pakistan Medical and Dental Council (formerly PM&DC) & Higher Education Commission, Pakistan (HEC) and is abstracted/indexed by Index Medicus for the Eastern Mediterranean Region (IMEMR), PakMediNet, Google Scholar, EBSCO, International Committee of Medical Journal Editors (ICMJE), Crossref and Centre for Agriculture and Bioscience International (CABI). The abbreviated name is "J Dow Univ

Health Sci". The journal is available online and submission and processes of manuscript can be made while emailing to jduhs@duhs.edu.pk.

2.2 Research Projects

2.2.1 Completed

Total number Completed in 2019-2020	33
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2.2.2 Newly launched projects (research)

Total number of Newly Launched in 2019-2020	6
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2.3 Publications & Authors Credited to DUHS

Category	2019	2020
W	33	41
X	16	16
Y	8	87
Z	70	276
TOTAL	127	464

2.4 Conferences, Seminars and Workshops:

Workshops/Training	Date
Hands on Workshop for IBM-SPSS	20th July 2019
Scientific Manuscript Writing	20th July 2019
EndNote for Referencing	14th Sep 2019
Data screening, analysis & reporting using MS Excel	12th Oct 2019
Sample size calculation using NCSS-PASS software	21st Sep 2019

CDE On “Research Write up and Social Media in Biomedical Sciences”	29th July 2019
Introduction to SPSS	7, October 2019

Key Performance Indicators regarding Research of the University

Research at the Dow University of Health Sciences	2019-2020
No. of High Quality Research Proposals	298
Total no. of Research Papers Published	285
No. of Research Paper Published in International Journals of High Impact Factor/HEC Approved Journals	128
No. of Research Paper Published in Other Journals	272
Total No. of Research Projects (DUHS only)	33
No. of Funded Research Projects (from external organizations)	28

2.5 Research Journal

Journal of Dow University of Health Sciences (JDUHS) Year 2019:

Volume - 13	Issue - 1	January to April - 2019
Volume - 13	Issue - 2	May to August - 2019
Volume - 13	Issue - 3	September to December - 2019
Volume -14	Issue -1	Published April 29, 2020
Total Issues of Journals in the month of January to December 2019		03 Issues in 2019

2.6 Research Collaborations

2.6.1 Indigenous Research Collaborations:

<ul style="list-style-type: none">• Aga Khan University, Pakistan
<ul style="list-style-type: none">• Liaquat University of Medical and Health Sciences
<ul style="list-style-type: none">• University of Karachi
<ul style="list-style-type: none">• Pak Ethanol (PVT) Limited
<ul style="list-style-type: none">• Martin Dow Pharmaceuticals
<ul style="list-style-type: none">• Nova Care (Dwago) Pharmacy chain,
<ul style="list-style-type: none">• OBS Pharma
<ul style="list-style-type: none">• ICCBS-HEJ, University of Karachi
<ul style="list-style-type: none">• PCMD-HEJ, University of Karachi
<ul style="list-style-type: none">• Bioequivalence Study Centre, University of Karachi

2.6.2 Foreign Linkages

1. Imperial College of London
2. University of Huddersfield, UK
3. Food & Agricultural Organization, UN
4. University of Sultan Zainulabidin, Malaysia

2.6.3 National Linkages

1. Institute of Business Administration
2. Husaini Hematology and Oncology Trust (Husaini Blood Bank)

2.6.4 Funding Grants for R&D from HEC, 2019-2020

S.No.	Title of Research Proposal	Amount Approved (Rs.)	Date of Approval	HEC Ref. No.
1	SRGP	465,000	6/5/2020	No.21-2751/SRGP/R&D/HEC/2020
2	CPEC PROJECTS INTERNATIONAL FUNDING	8.407 million	1/12/2020 - May-22	
3	CPEC PROJECTS INTERNATIONAL FUNDING	9.018 million	Sep 20 - May-21	
4	SRGP	10,00,000	1/5/2021	278/IPFP-II(Batch I)/SRGP/NAHE/HEC/2020/100
5	SRGP	10,00,000	1/15/2021	10759/IPFP-II(Batch-I)/SRGP/NAHE/HEC/2020/57
6	SRGP	10,00,000	1/15/2021	10794/IPFP-II(Batch-I)/SRGP/NAHE/HEC/2020/148

2.6.5 Vice Chancellor's Seed Funding Initiative (VCSFI)

Established Annual Vice Chancellor's Seed Funding Initiative (**VCSFI**) for Intramural Funding of Competitive Grant Applications

S #	Grant No	Title of Research Proposal	Amount Approved (Rs.)	Sponsoring Agency	Status
1	2019B-0043	Role of 7-ketocholesterol (7-kcho)in pathophysiology of diabetic nephropathy (DN):STREPTOZOTOCIN(STZ)induced disease model	5,000,000	VCSFI	In Process
2	2019B-0074	Preclinical studies of a novel simvastatin -lecithin stabilized Nano formulation against atherosclerosis in Apo-E knockout mice	5000000	VCSFI	Completed
3	2019B-0006	Establishment of a Microbial Bio source center (BIOBANK)	5000000	VCSFI	In Process
4	2019B-0078	Role of Autophagy in Different Histological subtypes of Adult diffuse gliomas	350,000	VCSFI	In Process
5	2019B-0087	Effects of Antenatal administration of Budesonide and Fluticasone Propionate on Intrauterine Fetal Growth: Special Emphasis on the regulation of breast cancer resistance protein (BCRP) and P glycoprotein (P-gp)	500,000	VCSFI	In Process
6	2019B-0004	Pharmacodynamics and pharmacokinetic studies on analogues of fluoroquinolones against MDR-TV	900,000	VCSFI	In Process
7	2019B-0072	Gene correction of specific 619 BP deletion using CRIS-PR-Cas9 in Induced Pluripotent stem cell derived from beta Thalassemia patients	500,000	VCSFI	In Process
8	2019B-0015	Participation in DUHS in normative Pakistan data collection for the evaluation Ayres sensory integration (EASI) an international project in collaboration with Thomas Jefferson University Philadelphia USA	700,000	VCSFI	In Process
9	2019B-0008	Housing & Health use of C-reactive protein (CPR) as a biomarker data	775,000	VCSFI	In Process
10	2019B-0005	Experimental validation of computationally designed anti-cancerous peptide, dip-36, against c-myc-usp 36 complex in diffused last beta-cell	725,000	VCSFI	In Process

11	2019B-0016	Osteogenic differentiation of Wnt Activated human periodontal ligaments stem cell (hPDLSCs) in Three dimensional (3D) hydrogels	500,000	VCSFI	Completed
12	2019B-0053	Microbial De Phosphorylation of phytic acid - An alternative approach to increase the bioavailability and bio access	500,000	VCSFI	In Process
13	2019PG-0022	Antenatal depression and anxiety in pregnant women and postpartum outcomes - A cohort study from Pakistan	244,300	VCSFI	In Process
14	2019PG-0065	In vitro and in vivo anticancer studies of targets flower extract and pure compound against hepatocellular carcinoma	250,000	VCSFI	Completed
15	2019PG-0075	Investigation c-MYC sequential and expressional polymorphism in oral squamous cell carcinoma	250,000	VCSFI	In Process
16	2019PG-0004	Impact of brain derived neurotropic factor gene polymorphism on its peripheral levels in schizophrenic patients	250,000	VCSFI	Completed
17	2019PG-0036	Investigation role of kaiso target proteins expression in field cancerization and tumor progression of oral squamous cell carcinoma (OSCC)	250,000	VCSFI	In Process
18	2019PG-0073	Dynamic soft tissue mobilization vs proprioceptive neuromuscular facilitation stretching in reducing hamstring muscle tightness in patient with knee osteoarthritis	250,000	VCSFI	In Process
19	2019PG-0077	Comparative analyses of physical and elemental characteristics of dental material of vertebrates	165,500	VCSFI	In Process
20	2019PG-0011	Investigation the synergistic effects of bevacizumab and celecoxib on angiogenesis using in vitro derived human umbilical vein endothelial cells	250,000	VCSFI	In Process
21	2019PG-0040	Association of polymorphisms in cytochrome P450 3A4 and dexycytidine kinase genes on the adverse effects by cytarabine in treatment of acute lymphoblastic/ myeloid leukemia	250,000	VCSFI	In Process

2.7 Operation of Office of Research, Innovation and Commercialization (ORIC)

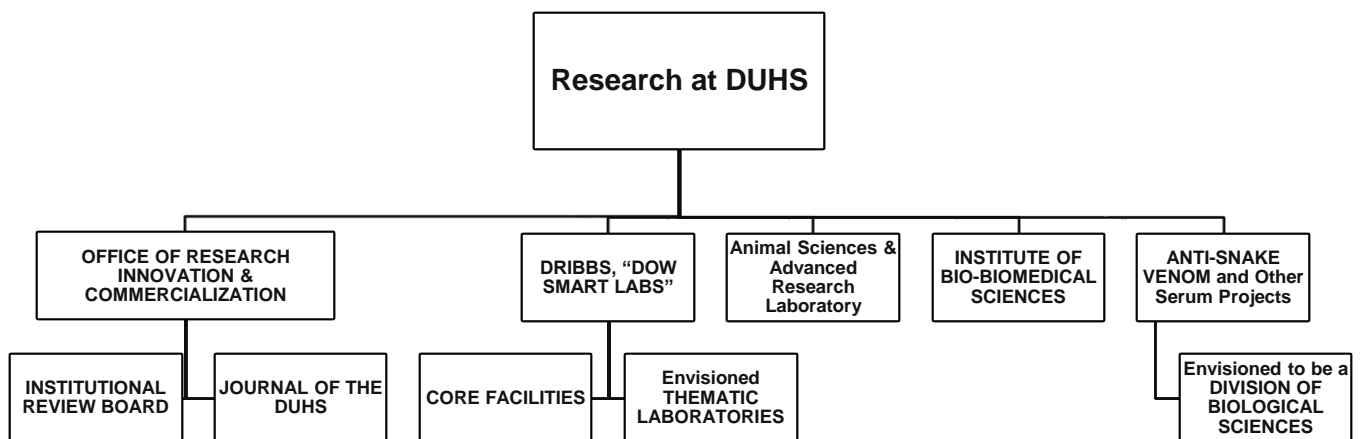
The Office of Research, Innovation and Commercialization 's Vision is to promote a culture of research and innovation, with a purpose to streamline the quality research with commercialization.

Introduction

In 2011, under the directives of Higher Education Commission (HEC) of Pakistan, DUHS developed Office of Research, Innovation and Commercialization (ORIC) to promote innovation and commercialization at the university.

The ORIC, DUHS since then, adapted policies for augmenting activities related to innovation and commercialization at DUHS. The ORIC office at DUHS has divided its activities into four diverse segments including research projects, linkage establishment, innovation support and commercialization.

Re-organization of Research at DUHS as per Strategic Vision 2030



Vision of ORIC

It is the Vision of ORIC, DUHS to promote and align various research projects at the University, which have a direct impact on the society today.

Innovation

ORIC, DUHS promotes innovative research ideas at the University through workshops, brainstorming sessions and intellectual property discussions with all major stakeholders of the University.

2.7.1 5th All Pakistan DUHS-DICE Health Innovation Exhibition 2019

The 5th All Pakistan DUHS – DICE Health Innovation Exhibition 2019 was held on October 16th – 17th, 2019 at the Expo Center, Karachi.

Dow University of Health Sciences is on a mission to revolutionize the academia with entrepreneurial activities. By the grace of Allah, we are heading towards “5th All Pakistan DUHS-DICE Health Innovation Exhibition - 2019”.

This distinguished and unique event will provide a platform for the entrepreneurs and young generation to share their innovative ideas and work for Academic Industry, Capitalists from Government and Private sectors and the expatriates to interact jointly and share knowledge at par with the developed countries.

The main objectives of this exhibition are:

1. To establish a strong linkage between Academia and Health providing institutions.
2. Motivate professionally educated youth to generate innovative ideas and utilize currently available state of art technologies and software, for practically possible development of health related products and services.
3. To foster culture of innovation and Entrepreneurship in the country and make it a part of Nation's DNA.
4. Globally creating a positive and favorable image of Pakistan's health sector.

Entrepreneurs and personnel of esteemed organizations / industry are invited to join us in the “5th All Pakistan DUHS – DICE Health Innovation Exhibition - 2019”, in which 350 innovative projects are showcased by more than 40 well known universities of Pakistan.

The DUHS DICE Health Innovation Exhibition 2019 was inaugurated by the honorable Vice Chancellor Prof. Muhammaed Saeed Quraishy, along with the Chairman DICE Health USA, Dr. Sohail Hassan (with their core DICE team) and Senator Taj Haider was invited as chief guest.

Vision Statement of the Exhibition

"Produce globally innovative ideas related to health industry to improve the quality of life of every individual"

Mission Statement of the Exhibition

- Absorb core values
- Promote innovative observes at all levels
- Reform procedures, systems and processes at all levels
- Mature faculty and staff members to meet the trials

Project Fair at a Glance

Dates: 16th-17th October - 2019, Time: 09:00 am onwards, Venue – Expo Center

- Total Number of Project Show Cased – 2000
- Total number of universities participated across Pakistan -20
- Total Number of Members Evaluating the Projects - 05
- Total Projects Rewarded as Special prize of Rs. 10,000 – 20 special and grand prize recipients.

National Innovation Basket Session (NIB)

Activity followed by Panel discussion to list down short term, medium term and long term projects for the sustainable growth of textile exports of Pakistan.

5 sessions on related to improve the quality of life of every individual were also the highlights of this auspicious event participated by well-known personalities related to medical devices, alternative medicine, health care, pharma & nutrition.

DUHS-DICE Shark Session

An initiative to pitch Top 10 good student research projects to CEOs/Technical Directors for funding with the objective to encourage innovation by youth and to make it beneficial for industry.

There were 10 pitching sessions in this category in which following ideas were pitched to the industrialists and entrepreneurs.

1. Vaswani Herbal Balm for muscular joints pain pitched by Dow College of Biotechnology,
2. Honey ointment for treatment of unhealed wounds. University of Karachi.
3. CAT RAT (Cardiovascular assessment tool and Respiratory assessment tool) by Hamdard University.
4. Shiress organic bath and body product line, by FUUAST Karachi,
5. Road Safety Smart phone app by School of Public Health, DUHS
6. Edible Soluble Wraps by School of Public Health, DUHS
7. Portable and Cost Effective Electroencephalography (EEG) Seizure Detection Device by Dow College of Pharmacy
8. Digital Range of Motion (ROM) Measurement System by Mehran University of Engineering and Technology, Jamshoro.
9. Production of Cellulose by Using Bagasse by Dow College of Biotechnology.

The most innovative ones were sponsored with 1.5 to 3 Lac Rupees by the industrialists.

2.7.2 Commercialization Activities of DUHS

ORIC, DUHS envisions financial sustainability of the University; therefore, it promotes transformation of innovative discoveries into industrial ventures. The entrepreneurship spirit has been nurtured at the University, leading to commercial projects in the year 2019-20, including the following:

Team Name	Team Synopsis	Startup-Phase
Vaswani's Healthcare products	Vaswani's Herbal Balm® for muscular & joints pain: The Journey to entrepreneurship, Concentrated Herbal Balm with pure essential Oils. Not diluted with water (Like most Creams), no alcohol, no chemicals or stabilizers. Natural with Aromatherapy benefits. No harmful preservatives, no Paraben, no sulfates, no toluene, no artificial colors, no artificial fragrances, no synthetic irritants/irritation. Deep penetration comfort & support with potent herbs and natural oils. Use with Back Pain Relief Brace, Copper Based Compression, Knee Brace, Tennis Elbow Brace and after TENS/EMS Machine. Our blend of traditional herbs creates a solution without harsh side effects. Made in PAKISTAN.	Launched
Morlieve Cosmetics	Grow to glow eyelashes serum promotes natural growth, Promote Naturally Longer, Thicker lashes in just 3 to 4 weeks contains naturally nourishing ingredients that strengthen eyelashes hair over time against breakage. It is totally organic without the use of any chemicals so this might be a good choice for those with sensitive skin. Easy applicator with brushes, Liquid formula, Night application, Feels like a Soft viscous liquid. Nourishing, Hydrating. This product can be store at room temperature. It can be stored till 2 years. Person having any life style can use this product before bed time.	Launched and Commercialized with 10+ Customers

2.7.3 DUHS-DICE SHARK: Project List

S No.	Project Title	University	Sponsor	Funding Awarded
1	Bread made by banana flour (gluten free)	School of Public Health, DUHS	Mr.Zeeshan Skill Orbit	Bridge
2	CAT RAT (Cardiovascular assessment tool and Respiratory assessment tool)	Hamdard University	Mr.Farhan Bridge	Bridge
3	Edible Soluble Wraps	School of Public Health, DUHS	KAIR Pharma	150,000 PKR
4	Production of Cellulase by Using Bagasse	Dow College of Biotechnology	Omni Group (bridge)	Bridge
5	Shiress” organic bath and body product line	FUUAST Karachi	Martin Dow	150,000 PKR
6	Road Safety Smart phone app	School of Public Health , DUHS	Hilton Pharma	300,000 Pkr
7	Honey ointment for treatment of unhealed wounds.	University of Karachi	Martin Dow	Total Buyin
8	Portable and Cost Effective Electroencephalography (EEG) Seizure Detection Device	Dow College of Pharmacy	Kair Pharma	300,000 Pkr
9	Vaswani Herbal Balm for muscular joints pain: The Journey to entrepreneurship	Dow College of Biotechnology	DICE Foundation	300,000 Pkr
10	Digital Range of Motion (ROM) Measurement System	Mehran University of Engineering and Technology, Jamshoro	Novartis	200,000 Pkr



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CHAPTER 3

Quality Assurance

3.1 Impact of Quality Assurance in the University

Dow University of Health Sciences has a well-developed Quality Assurance system that monitors the academic programs, in compliance with HEC criteria, Accreditation Councils and benchmarking with international standards.

Worldwide, universities rely on quality assurance procedures to achieve excellence in their academic programs, as well as to sustain it in future. In 2006, as per the directives of Higher Education Commission (HEC) Pakistan, the Quality Enhancement Cell (QEC) at Dow University of Health Sciences was established.

In this regard, number of measures for quality enhancement and assurance has introduced to have an effective quality assurance setup with standardized procedures and practices in health education, which includes:

- Faculty and course assessment through student feedback.
- Preparation of Program Self-Assessment Reports for all degree awarding programs.
- Implementation of Quality Management System at Dow University of Health Sciences, in accordance with minimum HEC criteria for graduate level and post-graduate programs.

3.2 Quality Enhancement Cell at DUHS

The Quality Enhancement Cell at Dow University of Health Sciences was established in the 1st phase of HEC implementation in 2006, along with 29 other cells in various public sector universities throughout Pakistan. The prime objective of QEC is to practice evaluative measures in order to achieve excellence in program delivery. Since its establishment, QEC is continuously involved in monitoring and measurement of Quality Management System (QMS) processes and the academic services throughout the DUHS.

Effectiveness of QEC-DUHS by HEC

- In 2019-20, the QEC-DUHS scored more than 92%.
- The Yearly Progress Report for 2019-20 is already submitted to HEC for evaluation.

Responsibilities of QEC-DUHS

The responsibilities of QEC include:

- Preparing and reviewing the program evaluation through Self- Assessment.
- Reviewing the Quality of teaching and learning in each subjected area through HEC prescribed feedback forms as per the guidelines given for each form in coordination with QMS coordinators and SAR Program Teams.
- Ensuring that the University's Quality Management System is designed to fit with the requirements of HEC.

- Follow-up on the accreditation of all the degree awarding programs offered by the University.

Major Achievements of QEC-DUHS

The major achievements of QEC-DUHS in 2019-2020 include:

Compliance for Online /Readiness Assessment:

The QEC, in support of the Directorate of Distance Education was able to successfully bring on board 389 courses authorized for online delivery, with 307 faculty members trained for online teaching through a certificate of training for online courses (Coursera Intl.), with a score of 91% overall on the following evaluation parameters by June 7th, 2020, as part of the Covid -19 pandemic moving of classes online and delivery of teaching through virtual means:

1. University Readiness
2. Course Readiness
3. Faculty Readiness
4. Technology Readiness
5. Library Readiness
6. Student Readiness
7. Evaluation Readiness
8. Laboratory Readiness

Key Performance Indicators of QEC-DUHS in University	Status as of 2019 - 2020
QEC Assessments	
No. of Academic Programs Assessed through Self-Assessment Reporting	All degree awarding programs
No. of Courses Assessed (Course-Wise Assessment Evaluations)	493 Courses Assessed Online
No. of Faculty Assessed (Student-Teacher Evaluation as Prescribed by HEC)	927 Online
Number of Programs with National or International Accreditations	32 Programs are Accredited
Number of Faculty Trained	173 QEC FD activities along with 307 online teaching readiness = 480 Faculty Trained

HEC prescribed Feedback Forms:

QEC-DUHS successfully conducted the following online Performa's for feedback evaluation in all the degree-awarding programs of DUHS:

Faculty Survey	Alumni Survey
Employer Survey	Faculty Resume
Faculty Course Review Report	Teacher Evaluation Form
Research Student Progress Review Form	Survey of Graduating Students
Survey of Department Offering Ph.D. Programs	Student Course Evaluation Questionnaire

Quality Initiatives FY 2019 - 2020

The quality initiatives for the Year 2019-2020, in compliance with the Higher Education Commission, Pakistan are the following:

1. Accreditation of All Programs, and grant of NOC from HEC for all postgraduate programs.
2. A greater focus on faculty professional development and training in special need areas.
3. Employee Development & Training, though, English Language Proficiency programs for faculty and staff.
4. Establishment of the QEC Setup at all the affiliated colleges of Dow University of Health Sciences

Establishment of the QEC Setup at all the affiliated colleges of Dow University of Health Sciences, as required by HEC, Pakistan

1. Indus College of Nursing & Midwifery
2. School of Nursing, Kharadar General Hospital
3. Horizon School of Nursing and Health Sciences
4. Suvastu School of Nursing and Health Sciences
5. Patel Institute of Nursing & Allied Health Sciences
6. College of Nursing, Memon Medical Institute Hospital

7. Saifee Burhani School of Nursing, Saifee Hospital Trust
8. National Institute of Cardiovascular Diseases (NICVD)
9. Shaheed Mohtarma Benazir Bhutto Medical College, Lyari
10. Murshid School of Nursing and Midwifery, (Murshid SONAM)

3.3 Membership of Quality Association/Networks

QEC has valuable memberships of different association/networks at International/National levels:

Memberships in Quality Associations/Networks
• Accreditation Agency Curacao – AAC
• Member of Tallories Network since 2009.
• Prospective member of Asia Pacific Quality Network (APQN).
• Member of Learning Innovation Division, HEC Pakistan since 2005.
• International Network for Quality Assurance Agencies in Higher Education
• Pakistan Network of Quality Assurance in Higher Education-PNQAHE
• American Association of Medical Colleges, Visiting Students Learning Opportunities.
• Corporate and Associate Member of Association of National and International Universities
• Research and Educational centers, such as PIQC, Institute of Quality, Pakistan

3.4 Accreditations of Degree Awarding Programs from Accreditation Councils

1. MBBS program at Dow Medical College (DMC) - Accredited by Pakistan Medical Commission (PMC)
2. MBBS program at Dow International Medical College (DIMC) - Accredited by Pakistan Medical Commission (PMC)
3. Bachelor of Dental Surgery (BDS) program at Dr. Ishrat ul Ebad Khan Institute of Oral Health Sciences (DIKIOHS) – Accredited by Pakistan Medical Commission (PMC)
4. Bachelor of Dental Surgery (BDS) program at Dow International Dental College (DIDC) – Accredited by Pakistan Medical Commission (PMC)
5. Pharm D program at Dow College of Pharmacy (DCOP) - Accredited by Pakistan Pharmacy Council (PPC).
6. Post RN Nursing program at Institute of Nursing (ION) - Accredited by Pakistan Nursing Council (PNC).
7. BS Generic Nursing program - Accredited by Pakistan Nursing Council (PNC).
8. Master of Nursing (MSN) program- Accredited by Pakistan Nursing Council (PNC).
9. Post RN BSM , Midwifery program at the Institute of Nursing and Midwifery- Accredited by Pakistan Nursing Council (PNC)
10. MPhil (Basic Medical Sciences) at Institute of Basic Medical Sciences- Accredited by Pakistan Medical Commission (PMC)
11. Master of Dental Surgery (MDS) program at Dr. Ishrat ul Ebad Khan Institute of Oral Health Sciences (DIKIOHS) - Accredited by Pakistan Medical Commission (PMC)
12. Master of Public Health (MPH) at School of Public Health- Accredited by Pakistan Medical Commission (PMC)
13. MS in Epidemiology and Biostatistics (MSBE) at School of Public Health- Accredited by Pakistan Medical Commission (PMC)
14. MS in Public Health (MSPH) at School of Public Health- Accredited by Pakistan Medical Commission (PMC)

15. Master in Health Professional Education (MHPE) at Dow Institute of Health Professionals Education- Accredited by Pakistan Medical Commission (PMC)
16. Master of Surgery (MS) at Department of Postgraduate Studies- Accredited by Pakistan Medical Commission (PMC)
17. Doctor of Medicine (MD) program at Department of Postgraduate Studies- Accredited by Pakistan Medical Commission (PMC)
18. BBA & MBA Programs are in the process of accreditation from National Business Education Accreditation Council (NBEAC).
19. Bachelor of Dental Surgery (BDS) program at Dow Dental College (DDC) is in process of accreditation from Pakistan Medical Commission (PMC)

3.5 Seminars/Workshops & Training Events at QEC

Following seminars/workshops and training QEC organized and contributed in the year 2019 – 2020

S. No.	Name of Event/Seminar/Workshop/ Training	Date	Purpose
1	Institutional Performance Evaluation 1 st Stage: Virtual meeting of selected groups of students, faculty and deans with evaluation team	30th June, 2020	To review the institutional performance, as per the standards recommended by QAA-HEC.
2	Online Assessment Team Meeting to assess SAR of BSMT Program (All Specialties) offered at IMT –DUHS.	27 June, 2020	To review and evaluate the SAR report and prepare a report of assessment findings to be submitted to VC office and HEC through QEC.
3	Online Assessment Team Meeting to assess SAR of BSN & Post RN BSN Program offered at Horizon School of Nursing	23 June, 2020	To review and evaluate the SAR report and prepare a report of assessment findings to be submitted to VC office and HEC through QEC.

4	Online Assessment Team Meeting to assess SAR of BSN & Post RN BSN Program offered at Suvastu School of Nursing	22 June, 2020	To review and evaluate the SAR report and prepare a report of assessment findings to be submitted to VC office and HEC through QEC.
5	Online Assessment Team Meeting to assess SAR of BS Nutrition & BS Biotechnology (DT) Program offered at SPH & DCOB respectively.	18 June, 2020	To review and evaluate the SAR report and prepare a report of assessment findings to be submitted to VC office and HEC through QEC.
6	Online Assessment Team Meeting to assess SAR of BS DCP (DH) & BS DCP (DT) Program offered at SDCP - DUHS.	17 June, 2020	To review and evaluate the SAR report and prepare a report of assessment findings to be submitted to VC office and HEC through QEC.
7	Online Assessment Team Meeting to assess SAR of BSRT Program offered at DIR	17 June, 2020	To review and evaluate the SAR report and prepare a report of assessment findings to be submitted to VC office and HEC through QEC.
8	Online Assessment Team Meeting to assess SAR of DPT, MSAPT, BS OT, BS P&O Programs offered at IPM&R-DUHS.	16 June, 2020	To review and evaluate the SAR report and prepare a report of assessment findings to be submitted to VC office and HEC through QEC.
9	Online Internal Evaluation of MS/M.Phil. and Ph.D. equivalent program Review conducted by Quality Enhancement Cell for the postgraduate programs offered at IBMS, IHPE, DIKIOHS, SPH, ION, IHM, DCOP & IPM&R.	29 June, 2020	To assess the adherence of the programs to minimum HEC criteria for MS/M.Phil. And Ph.D. equivalent programs.
10	Workshop on "Professional English Language Training Program" organized by QEC	21st Feb to 28th Feb, 2019	To improve English proficiency and speaking skills of faculty, staff and students of DUHS

11	Awareness Session on Self-Assessment Report for Affiliated & Constituent Colleges/Institute/ Schools of DUHS organized by QEC - DUHS	9 Dec, 2019	To aware the participants about the importance and procedure of SAR with respect to quality assurance of academic program.
12	Attended Session on "Challenging Dynamic of Assessment Methodologies at Higher Education" at Dadabhoy Institute of Higher Education.	24 Oct, 2019	To choose appropriate assessment methodology, develop transparent scoring criteria and assessments that ensure appropriate emphasis and inclusion of all the educational objectives and assure quality of examination as well as assessments methods.
13	Attended 1st International Seminar on Times Higher Education University Rankings at Lahore	24 Oct, 2019	To understand how to use different data and benchmarking tools to achieve university strategic goals.
14	Attended QEC's consultative session on " Increasing Collaboration Among QECs" at IBA	18 Oct, 2019	To enhance and build together by sharing good practices and developing better and deeper measures to assure quality education.



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CHAPTER 4

**Faculty
Development**

4.1 Professional Development Center (PDC) DUHS

With the establishment of Dow University of Health Sciences (DUHS) in 2004, it was envisioned that Continuing Medical Education (CME) should be promoted within the faculty and students of Dow University. Professional Development Center started working as the “Office of CME” as of January 2004. Under this office, CME lectures, seminars, symposia and conferences were conducted on a regular basis. Furthermore, International Health Days were celebrated regularly. Over a period of a year and a half, the faculty dedicated to PDC managed to organize more than 100 national and International events, with the dedication and efforts of the Faculty and Alumni abroad.

After the devastating earthquake of 2005, it was thought to add hands-on workshops in addition to the CME lectures, which were mostly theoretical. Thus the Office of CME was amalgamated into a more comprehensive “Professional Development Centre” (PDC) of Dow University of Health Sciences. Also, a formal inauguration was performed by the Chancellor of the University, Governor of Sindh.

Subsequent to its formation, two divisions were formed within the PDC, namely Surgical and Allied and the Medical and Allied, where faculty members were designated as Directors of these two divisions. They were given the task to do a Training Needs Assessment and offer programs for different categories of health Professionals.

The Professional Development Centre has simulated ICU, simulated Operation Theatre, Laparoscopic / Endoscopic Suites, three training halls and a Conference Room. Equipped with the latest audio-visual and multimedia systems, state of art equipment, electronic simulators and manikins, the PDC is a site for all those healthcare professionals looking to enhance their skills with hands-on training.

Professional Development Centre currently provides training facility in the basic and advanced skills to undergraduates, postgraduates, residents, faculty members and other health professionals. PDC has its head office at DMC with its branch at Dow International Medical College (DIMC), Ojha with similar facilities, equipment and instructors. Each wing of PDC has a dedicated Undergraduate Skills Lab.

PDC consists of CME, CPD, and Skills & Misc. Programs

1. Continuing Medical Education (which deals with Seminars, lectures, symposia and conferences).
2. Continuing Professional Development (that deals with long duration & short duration training courses and hands-on workshops).
3. Undergraduate Skills Lab (which deals with the training of undergraduate students).
4. Miscellaneous programs (that include programs like visiting faculty, reproductive health and alumni affairs).

Since its inception in October, 2005 Professional Development Centre has conducted CMEs & Miscellaneous Programs in collaboration with National & International Organizations, like PTC Foundation UK, American Heart Association, North Middlesex University Hospital, London, IMPACT Nepal, Amber Institute of California, INTER BURNS, INFORM, EMAME & EmONC, FALAH, US AID, UNFPA & WHO.

4.2 Faculty Developments Programs (Local & Foreign MS/Ph.D.)

The purpose of faculty development is to support and encourage the activities undertaken for development and professional growth of the faculty members of the Dow University of Health Sciences.

These initiatives are framed keeping in mind the University's Mission to create a culture of academic excellence. Furthermore, the teaching departments of the University are anchored on faculty continuous training and development.

4.2 Returned Scholars (Present at University)

Returned Scholars (Present within the University)		
Asma Khurshid	Rafat Amin	Naresh Kumar
Jawad Safdar	Sadaf Khan	Omer Mustapha
Kashif Shafiq	Shaukat Ali	Mushtaq Hussain
Maheera Moin	Sonia Siddiqui	Samreen Memon
Mansoor Ahmed	Syed Imran Mehmood	Mohsin Wahid
Tehseen Fatima	Sadia Shakeel	Syed Saoud Zaidi
Muhammad Aamir Mirza	Muhammad Asif Qureshi	Muhammad Furqan Bari
Muhammad Sameer Qureshi	Muhammad Yahya Noori	

4.3 List of Ph.D. Indigenous Batch

S. No.	Name	Discipline
1.	Naheed Khan	Anatomy
2.	Khalida Parveen	Anatomy
3.	Tazeen Mustansar	Histopathology
4.	Zameer Ahmed	Microbiology
5.	Nighat Mannan	Physiology
6.	Ambrina Qureshi	Community Dentistry
7.	Muhammad Adeel Ahmed	Operative Dentistry
8.	Arshad Hasan	Operative Dentistry
9.	Amynah Charania	Oral Biology
10.	Anwar Ali	Oral Surgery
11.	Shaheen Ahmed	Oral Surgery
12.	Shazia Jabbar	Gynae & Obs
13.	Junaid Ashraf	Neurosciences
14.	M. Asim Khan Rehmani	Neurosciences
15.	Naila Naeem	Neurosciences
16.	Muhammad Masroor	Medicine
17.	Sofia Nigar	Anatomy
18.	Aisha Abdul Haq	Anatomy
19.	Sarwat Jabeen	Anatomy
20.	Durr-e-sameen	Histopathology
21.	Mahjabeen Khan	Public Health
22.	M. Athar Majeed Khan	Public Health

23.	Malik Tajuddin	Public Health
24.	Ruqaiya Shahid	Histopathology
25.	Farheen Sultan	Histopathology
26.	Rubina Gulzar	Histopathology
27.	Saba Hassan	Histopathology
28.	Lubna Avesi	Histopathology
29.	Fatima Fasih	Microbiology
30.	Ambreen Qamar	Physiology
31.	Ashar Afaq	Community Dentistry
32.	Sofia Ali Syed	Oral Pathology
33.	Muhammad Tahir Rizwan Khan	Public Health
34.	Shahkamal Hashmi	Public Health
35.	Mahrukh Qasim	Anatomy
36.	Syed Inayat Ali	Anatomy
37.	Bushra Sikandar	Histopathology
38.	Saima Naseem	Microbiology
39.	Fuad Shaikh	Pharmacology
40.	Mazhar Iqbal	Public Health
41.	Zeeshan Noor Shaikh	Public Health
42.	Sahar Iqbal	Chemical Pathology
43.	Uzma Bukhari	Histopathology
44.	Ambreen Fatima	Medical Microbiology
45.	Syeda Kanwal Aslam	Public Health
46.	Qamar Saeed	Public Health

47.	Nabil	Public Health
48.	Sahar Mubeen	Anatomy
49.	Iffat Raza	Anatomy
50.	Iftekhar Ahmed	Medicine

4.4 Pre-Services and In-Services Professional Development Programs

Healthcare Professional & Other Faculty Trained by Professional Development Centre at Ojha & DMC Campus.

S. No.	Title of Training	Date of Event	No. of Participants	Major Focus Area	Audience Type (student /faculty /staff)
National Workshops/ Trainings/ Professional Skills Development					
1	Basic Life Support	July 2019 to 30 th June 2020	119	Life Support	All
2	First Aid Skills	July 2019 to 30 th June 2020	147	First Aid Skills	All
3	Basic Surgical Skills	04 th Dec 2019	23	Surgical Skills	All
4	07 Preparatory Course Of FCPS –II Exam Toacs Short and long Cases	16 th Dec to 19 th Dec 2019	73	Exam in Orthopedic	All
5	Intra Articular Plasma Injection	20 th Dec 2019	28		All
6	Injection Botox	20 th Dec 2019	32		All
7	Application of Surgical Staples in Thoracic Surgery	22 nd Jan 2020	44		All
8	Workshop on Implant	27 th Feb 2020	42		All
9	CPR and Chocking	16 th March 2020	10		All
10	English Language Course	25 th Feb to 02 nd March 2020	80	Faculty & Students	All
	Total		598		

4.5 Online Teaching and Faculty Readiness

In the wake of the uncertain situation due to the sudden coronavirus lockdown, the Higher Education Commission (HEC) had asked all universities to switch to online teaching. HEC had provided policy guidelines that mandated all universities to train their staff / faculty accordingly and restart academic activities online. In view of above, Dow University of Health Sciences framed a policy for Distance Education & Online Teaching in April 2021, which was formulated and shared with all relevant stakeholders. The purpose of this policy was to set the framework for distance education and online courses offered by the University during the Covid-19 circumstances. A policy guideline was also provided by the Higher Education Commission Pakistan labelled 'Policy Guidance Note 5: Online Readiness,' which provide parameters for guidance on working domains of university governance, course readiness, faculty readiness, teaching readiness, library readiness, technology readiness, student readiness, evaluation readiness, laboratory readiness and the re-opening policy. Furthermore, the scope of the online teaching policy was to define the mission of distance education and online teaching, so as to help students with educational opportunities offered outside the traditional classroom, in an environment that meets DUHS's high-quality standards and commitment to academic excellence, which was reflected in overall University readiness score awarded by HEC at 91.43%, encompassing all those domains as defined above.

Since there was a special emphasis placed on the faculty readiness in terms of being able to teach and deliver courses online, which was enhanced by trainings and other needed development courses offered to them. Then during the latter half of the semester, DUHS was able to offer and take online examinations, with a fully developed evaluation mechanism. Students were promoted based on real time assessments and viva voce examinations, which were a valid method of assessment as per policies of HEC and other regulatory bodies. The successful transition to online teaching fully equipped the University to transition to a hybrid mode of teaching for the fall semester, where 428 courses were authorized to be offered online, out of 478 totals, out of which 189 were taught in hybrid mode and 50 courses taught on campus, which mostly included laboratories and other practical sessions. The faculty readiness was at its peak, with all 1110 faculty having certified successfully to be able to teach online through an introductory course on the subject, with 927 faculty members actively involved in online teaching during the semester.



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CHAPTER 5

Access

5.1 Basic Enrollment

Total Student enrolment during FY2019-20 is **8006** for graduate, post-graduate and diploma programs offered.

5.2 Equity

In Dow University of Health Sciences, admissions are granted on transparent open merit basis for all applicants, regardless of gender, sex, race or ethnic background.

5.3 Gender-wise Detail

Institute/College/ School	Program	Years of Education	Total (M)	Total (F)	Grand Total
Dow Medical College- DMC	MBBS	1 st year (1 st Sem)	104	226	330
		2 nd year (3 rd Sem)	106	222	328
		3 rd year (5 th Sem)	100	225	325
		4 th year (7 th Sem)	78	273	351
		5 th year (9 th Sem)	81	263	344
Dr Ruth KM Pfau Civil Hospital Karachi	Doctor of Medicine- MD	1 st year (1 st Sem)	0	0	0
		2 nd year (3 rd Sem)	0	0	0
		3 rd year (5 th Sem)	1	0	1
		4 th year (7 th Sem)	7	6	13
		5 th year (9 th Sem)	4	4	8
		Course work / Thesis	5	8	13
	Master of Surgery-MS	1 st year (1 st Sem)	0	0	0
		2 nd year (3 rd Sem)	0	0	0
		3 rd year (5 th Sem)	1	1	2
		4 th year (7 th Sem)	6	0	6
		5 th year (9 th Sem)	8	0	8

		Course work / Thesis	3	0	3
Dow Dental College- DDC	BDS	1 st year (1 st Sem)	5	45	50
		2 nd year (3 rd Sem)	7	41	48
		3 rd year (5 th Sem)	5	42	47
		4 th year (7 th Sem)	6	45	51
Institute of Physical Medicine & Rehabilitation-IPM&R	Doctor of Physical Therapy-DPT	1 st year (1 st Sem)	17	83	100
		2 nd year (3 rd Sem)	17	81	98
		3 rd year (5 th Sem)	18	80	98
		4 th year (7 th Sem)	19	134	153
		5 th year (9 th Sem)	17	127	144
	Physical Medicine & Rehabilitation	1 st year (1 st Sem)	7	32	39
		2 nd year (3 rd Sem)	6	34	40
		3 rd year (5 th Sem)	6	29	35
		4 th year (7 th Sem)	0	35	35
	MS APT	1 st year (1 st Sem)	2	9	11
		2 nd year (3 rd Sem)	5	14	19
	Dr Ruth KM Pfau Civil Hospital Karachi	FCPS-II	1 st year (1 st Sem)	65	170
2 nd year (3 rd Sem)			50	226	276
3 rd year (5 th Sem)			24	129	153
4 th year (7 th Sem)			29	61	90
Diploma in Medical Jurisprudence		1 st year (1 st Sem)	0	1	1
		2 nd year (3 rd Sem)	2	1	3
Diploma in Child Health		1 st year (1 st Sem)	0	0	0
		2 nd year (3 rd Sem)	1	2	3

	Diploma in Cardiology	1 st year (1 st Sem)	1	1	2
		2 nd year (3 rd Sem)	3	0	3
	Diploma in Family Medicine	1 st year (1 st Sem)	0	8	8
		2 nd year (3 rd Sem)	0	3	3
	Diploma in Laryngology & Otolaryngology	1 st year (1 st Sem)	0	1	1
		2 nd year (3 rd Sem)	0	1	1
	Diploma in Dermatology	1 st year (1 st Sem)	2	8	10
		2 nd year (3 rd Sem)	1	7	8
	Diploma in Ophthalmology	1 st year (1 st Sem)	0	0	0
		2 nd year (3 rd Sem)	1	0	1
	Diploma in Critical Care Medicine	1 st year (1 st Sem)	1	0	1
		2 nd year (3 rd Sem)	0	0	0
Dow International Medical College-DIMC	MBBS	1 st year (1 st Sem)	74	85	159
		2 nd year (3 rd Sem)	68	79	147
		3 rd year (5 th Sem)	61	87	148
		4 th year (7 th Sem)	56	91	147
		5 th year (9 th Sem)	47	72	119
Dow International Dental College-DIDC	BDS	1 st year (1 st Sem)	11	47	58
		2 nd year (3 rd Sem)	12	42	54
		3 rd year (5 th Sem)	12	39	51
		4 th year (7 th Sem)	11	45	56
Dr. Ishrat ul Ibad Khan Institute of Oral Health Sciences-DIKIOHS	BDS	1 st year (1 st Sem)	17	88	105
		2 nd year (3 rd Sem)	19	85	104
		3 rd year (5 th Sem)	25	70	95

		4 th year (7 th Sem)	13	89	102
	MDS	1 st year (1 st Sem)	3	7	10
		2 nd year (3 rd Sem)	6	4	10
		3 rd year (5 th Sem)	20	17	37
		4 th year (7 th Sem)	9	10	19
		Course work / Thesis	31	39	70
	MSc DS	Course work / Thesis	23	41	64
School of Dental Care Professional-SDCP	Dental Care Professional-DCP	1 st year (1 st Sem)	2	28	30
		2 nd year (3 rd Sem)	3	26	29
		3 rd year (5 th Sem)	6	18	24
		4 th year (7 th Sem)	3	20	23
Dow College of Pharmacy-DCOP	Pharm-D	1 st year (1 st Sem)	15	136	151
		2 nd year (3 rd Sem)	22	132	154
		3 rd year (5 th Sem)	20	121	141
		4 th year (7 th Sem)	19	117	136
		5 th year (9 th Sem)	5	120	125
	M Phil Pharmaceutical Sciences	1 st year (1 st Sem)	0	2	2
		2 nd year (3 rd Sem)	0	0	0
		Course work / Thesis	1	6	7
Institute of Medical Technology-IMT	BS Medical Technology	1 st year (1 st Sem)	14	86	100
		2 nd year (3 rd Sem)	16	87	103
		3 rd year (5 th Sem)	17	98	115
		4 th year (7 th Sem)	8	105	113

	BS Optometry	1 st year (1 st Sem)	1	32	33	
Institute of Business & Health Management- IBHM	Bachelor in Business Administration- BBA	1 st year (1 st Sem)	19	43	62	
		2 nd year (3 rd Sem)	28	60	88	
		3 rd year (5 th Sem)	17	42	59	
		4 th year (7 th Sem)	9	44	53	
	Master in Business Administration- MBA	1 st year (1 st Sem)	0	0	0	
		2 nd year (3 rd Sem)	14	19	33	
		3 rd year (5 th Sem)	2	5	7	
		4 th year (7 th Sem)	0	0	0	
	Master in Business Administration Executive- EMBA	1 st year (1 st Sem)	0	0	0	
		2 nd year (3 rd Sem)	22	25	47	
	Dow Institute of Nursing & Midwifery- DIONM	BS Nursing	1 st year (1 st Sem)	50	50	100
			2 nd year (3 rd Sem)	5	44	49
3 rd year (5 th Sem)			6	30	36	
4 th year (7 th Sem)			5	21	26	
Post RN BS Nursing		1 st year (1 st Sem)	59	25	84	
		2 nd year (3 rd Sem)	19	10	29	
Post RN BS Midwifery		1 st year (1 st Sem)	0	20	20	
		2 nd year (3 rd Sem)	0	0	0	
MS Nursing		1 st year (1 st Sem)	0	0	0	
		2 nd year (3 rd Sem)	7	2	9	
		Course work / Thesis	19	18	37	
		1 st year (1 st Sem)	0	0	0	

		2 nd year (3 rd Sem)	1	0	1	
Dow Institute of Radiology-DIR	BS Radiologic Technology	1 st year (1 st Sem)	2	18	20	
		2 nd year (3 rd Sem)	2	18	20	
		3 rd year (5 th Sem)	12	42	54	
		4 th year (7 th Sem)	3	11	14	
	Diploma in Radiology	1 st year (1 st Sem)	0	2	2	
		2 nd year (3 rd Sem)	1	4	5	
	Diploma in Echocardiography	1 st year (1 st Sem)	3	0	3	
School of Public Health-SPH	BS Nutrition	1 st year (1 st Sem)	0	35	35	
		2 nd year (3 rd Sem)	0	29	29	
		3 rd year (5 th Sem)	0	28	28	
		4 th year (7 th Sem)	1	70	71	
	MS Biostatistics & Epidemiology-MSBE	1 st year (1 st Sem)	2	6	8	
		2 nd year (3 rd Sem)	1	5	6	
	Master in Public Health- MPH	1 st year (1 st Sem)	3	3	6	
		2 nd year (3 rd Sem)	6	18	24	
	Master of Science in Public Health- MSPH	1 st year (1 st Sem)	0	3	3	
		2 nd year (3 rd Sem)	4	10	14	
		Course work / Thesis	17	10	27	
	Dow College of Biotechnology-DCOB	BS Biotechnology	1 st year (1 st Sem)	12	92	104
			2 nd year (3 rd Sem)	16	81	97
3 rd year (5 th Sem)			14	85	99	
4 th year (7 th Sem)			10	83	93	
Institute of Biomedical Sciences-IBMS	MPhil in Basic Medical Sciences	1 st year (1 st Sem)	3	6	9	
		2 nd year (3 rd Sem)	3	9	12	

		Course work / Thesis	11	50	61
	PhD	1 st year (1 st Sem)	0	0	0
		2 nd year (3 rd Sem)	0	0	0
		3 rd year (5 th Sem)	2	6	8
		4 th year (7 th Sem)	4	3	7
		Course work / Thesis	13	21	34
Institute of Health Professionals Education-IHPE	Master in Health Professional Education-MHPE	1 st year (1 st Sem)	4	1	5
		2 nd year (3 rd Sem)	4	6	10
		Course work / Thesis	2	14	16
National Institute of Diabetes & Endocrinology-NIDE	MSc Diabetes & Endocrinology	1 st year (1 st Sem)	0	0	0
		2 nd year (3 rd Sem)	1	0	2

5.4 Employability

The graduates of Dow University of Health Sciences are serving in almost all prominent health care institutions & organizations of Pakistan, as well as at international levels.

Some major employers of DUHS graduates include the following:

- College of Physicians and Surgeons, Pakistan
- Sindh Institute of Urology and Transplantation (SIUT)
- National and Multinational Pharmaceutical Companies
- Private Hospitals locally and internationally.
- Public & Private Sector Medical Colleges & Universities
- Multinational and Private Limited companies

Batch Pass Out Year	ALUMNI / GRADUATES Currently Working in the following Organization
2008	Dr. Ruth K M Pfau Civil Hospital Karachi
2010	Ministry Of Health (MOH)
2012	Private Practice As Medical Director
2014	DUHS, Dow University Hospital
2015	Jinnah University For Women
2015	Liaquat National Hospital And Medical College

2015	HANDS NGO
2015	Sindh Institute Of Urology And Transplantation
2017	National Institute Of Cardiovascular Diseases (NICVD)
2017	NIBD & BMT Karachi
2017	Patel Hospital
2018	Memon Medical Institute (MMI)
2018	Dow University Of Health Sciences, DIHPE
2018	Dow University Of Health Sciences, QEC
2018	Al Mustafa Hospital
2018	Jinnah Medical And Dental College
2018	Indus Hospital
2018	Aman Foundation
2018	The Kidney Centre PGTI
2019	Dow University Hospital
2019	Habib University
2019	Toastmasters Club
2018	Kharadar General Hospital Karachi
2018	Brookes Pharmaceuticals
2019	Tabba Heart Institute
2018	Thekaydaar Online Pvt Ltd
2017	GE Solucions Pvt. Limited
2018	Gulf Schooling System
2017	Unity Foods Limited
2017	The Citizens Foundation
2019	Green Crescent Trust
2019	DOW University Hospital
2018	Bank Islami
2017	Alsharqi Shipping
2017	Governor's House, Sindh
2018	Cake A Story
2017	Usman Public School System Campus-VI
2015	Filters Experts

2019	HEC
2017	Aga Khan University, Karachi
2018	Ali Builders & Developers
2018	Sanauulla Corporation
2018	Gallant Foundation School
2017	Jannat Fabrics
2018	DHL Global Forwarding
2018	Sindh Sui Gas Company Karachi (SSGC)
2018	Dow University Of Health Sciences
2018	School Teacher At Private School
2018	Darson Securities Ltd
2017	Aga Khan Education Service Pakistan
2018	Meezan Bank
2018	SSGC, Internship
2019	CSS Aspirant
2018	Abbott
2015	Filters Experts
2015	Pakistan Rangers
2015	The Educator School
2015	Karachi Electric Supply Company (KESC)
2015	National Bank Pakistan
2015	Meezan Bank
2015	AGA Khan University As Research Associate
2015	South City Hospital, Karachi
2016	United Bank Limited, Karachi
2016	GSM
2017	Foreign Travelling Agency
2018	Gallant Foundation School
2018	Halo Intl. Marketing
2018	K Electric
2018	SZABIST
2018	Private Business Haroon Oil Limited

2018	Leopard Courier Service
2018	Jubilee Life Insurance
2018	SSGC
2019	Mehran International Dental Clinics
2019	Al Baraka Bank

5.5 Faculty-Student Ratio

In the year 2019-2020, the faculty-student ratio is calculated as follows:

Faculty-Student Ratio	
Total Number of Faculty	1076
Total Number of Enrolled Students	8006
Faculty-Student Ratio of University	1:8



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CHAPTER 6

**University Building
Economies**

6.1 University – Industry Linkages

Dow University of Health Sciences, Karachi is dedicated to building collaborations and linkages with various national and international industries and still engaged in the process of enhancing strong linkages.

- Dow University of Health Sciences has developed university industry linkages with several pharmaceutical companies for Research and development.
- Dow University has an agreement with National Research Program for Universities, which is a National program.
- The University enhanced its industry linkage by signing MOU with the international organization, DICE Foundation. It will act as a pragmatic platform for health related innovation & for collaboration among academia, industry, government, entrepreneurs and Expatriate community on all matters pertaining to the growth of health sector in Pakistan.

6.2 Initiatives

Special Education and Vocational Training Department at IPM&R

The Department of Special Education and Vocational Training for Children was established in 2017 at IPM&R, DUHS. It is the first of its kind in a teaching hospital in Pakistan. The Department of Special Education and Vocational Training for Children has a school and vocational training facility for children with special needs. The team at the Department of Special Education and Vocational Training comprises of special educators, occupational therapist and skill trainers in art, music, computers, sports and product development.

The services offered at the department of special education and vocational training are a school Program and vocational Training Program.

Awareness Program

Students of IMT has started websites for awareness of general public about health education. To highlight societal and health issues, students of IMT are engaged in highlighting these issues through documentaries and scientific animations.

- **Food Lab**

School of Public Health established a Food Preparation Laboratory in August 2019. It has the capacity to cater 30 students at a time. It is a facility that can help to explore the science of cooking foods under controlled conditions in which scientific or technological experiments, measurements and research may be performed. It helps the student to have a practical experience regarding the equipment and different techniques involved in food preparation and service. A learning experience related to sensory evaluation/ organoleptic properties of food products such as quality, texture, behavior, odor and appearance.

Practical develops the ability to understand physical structure, chemical composition and nutritive value of foods with emphasis on the effect of the physical and chemical environment

on the finished food product. The finished product needs to have uniformity in each product, the study on properties, both physical and chemical defines the behavior of raw materials added which influences the final product ultimately.

- **Food Sciences Laboratory**

School of Public Health inaugurated Food Science Lab in 2019 is a facility where development, application and study of analytical procedure for characterizing the properties of food and its constituents are undertaken. The lab will help the students to understand procedures, and techniques of physical, chemical and biochemical analyses of foods. This particular laboratory will cover three basic aspects (a) Food analysis (b) Food engineering & (c) Food Chemistry. The food lab will substantiate theory teaching with practical in various courses to the BS- Nutrition students. The lab is Equipped with Drying oven, Refrigerator, Autoclave, Microscopes (09), Water bath, pH meter, Automatic Refractometer, Spectrophotometer, Milk analyzer, Analytical Balance, Soxhlet unit, Kjeldahl unit, High performance liquid chromatography (HPLC), Gas chromatograph (GC), and Rotary unit. In addition to fulfill students' requirement, the lab has the capacity to serve commercially as well.

6.3 Technology Incubation Centre

The Dow University of Health Sciences, Karachi, is still in process of developing the Technology Incubation Centre. As far as current innovations are concerned, there are various technologies, infrastructure which are used and these may vary product-to-product.

The plans to establish a Technology Incubation Center at DUHS is designed for FY 2018-2019 with funding support from HEC, which was granted in 2018

6.4 Patents/Trademarks

Dow University of Health Sciences is engaged in process of trademark registration by University Legal Consultant.

The registered trademarks of Dow University of Health Sciences are as below:

S.No.	App. #	Class	Trademark	Date	Status
1	308949	44	DOW	21/10/14	Registered
2	344473	5	Shaffaf (Logo)	05/08/13	Registered
3	344474	32	Riva (Label Mark)	05/08/13	Registered

6.5 Internships and Placement Office

Clinical Electives

In the recent years, there is an increasing interest of the final year students of Medicine for doing electives in different medical schools/hospitals in the United States. The Quality Enhancement Cell, QEC-DUHS is also responsible for developing collaboration and linkages with other universities and colleges around the globe in different areas of interest.

DUHS has developed a Memorandum of Agreement with some of the prestigious foreign Medical Schools and associations for clinical electives namely:

Associations of DUHS for clinical electives with the following colleges	
University of Illinois	Chicago
AAMC	Visiting Students VSLO Learning Opportunities
<ul style="list-style-type: none"> • Jackson park hospital, Chicago. • Holyoke Medical Centre, MA • Mayo Clinic, Rochester USA. • Mount Sinai Hospital, New York. • Specialty hospital of Washington. • Harvard Medical School, Boston USA. • North West General Hospital, Peshawar • Robert Wood Johnson University Hospital. New Jersey. • Harrison Count Hospital, Corydon, USA. • Winnie Palmer Hospital, Florida USA. • FIU, USA 	Clinical Electives offered at various National & International Hospitals

Internships

The Placement office of each College/ Institute or School ensures the student secures a placement, which will support their learning requirements and nurture their professional development.

All work placements must be officially approved by the Registrar-DUHS and primarily involves the process of CV selection and competitive interview (if necessary) by the HoD/ Principal or Director, but can also be secured by direct matching if the student applies directly. The selection process is determined by the host organization. The Placement coordinator provides both group and one-to-one support to the students in the researching, sourcing, securing of placement and ongoing support of student whilst on internship or placement.

We are fully conscious of the utility of earning practical experience for students by undergoing internship(s) during their studies and after completion their studies. Interning in a field of choice will stand out on students" resume and help them with their job search after graduation. Students/interns should endeavor to gain on-the-job training that integrates education and career development; while organizations and companies hosting interns also benefit from the contributions of creative and innovative students. Students" networking during the course of their internship become subsequently professional "contacts" who can help guide their career path as they make their way into professional world.

The internship placements are taking place at Institute of Health Management for the passed out batches, Institute of Medical Technology, and also at IPM&R. Final year students of Institute of Physical Medicine and Rehabilitation-Occupational Therapy department are placed at different hospitals and clinics for rotations and for learning purposes.

Students at IPM&R are placed at the following institutes under the placement program:

Indus Hospital	Patel Hospital	Rabia Moon Trust
Tabba Heart Institute	Civil Hospital Karachi	SMBB Trauma Center
Ashfaque Memorial Center	Ma Ayesha Memorial Centre	Ziauddin Hospital Clifton Campus
Ziauddin Hospital Kemari Campus	Jinnah Postgraduate Medical Center	Ziauddin Hospital North Nazimabad Campus
National Institute of Cardiovascular Disease (NICVD)		

Graduates of Dow College of Pharmacy find placements in Liaquat National Hospital, NICVD, AKUH, Kiran hospital, Dr. Ziauddin Hospital, Indus Hospital and Dr. AQ Khan Institute of Behavioural Sciences. Placement office of DCOP facilitated the screening activity of students for placement at Martin Dow.

IMT provide internship to graduates at Dr. Ruth Pfau hospital Karachi, South City Hospital, NICVD, Dow University Hospital, Memon Medical Institute, Aga Khan University Hospital,

Liaquat National Hospital, Essa Lab, Shaukat Khanum Laboratory, LUMHS laboratory, Dow Diagnostic and Reference Laboratory, Hussaini Blood Bank, SMBB Institute of Trauma, Anatolia Gene Products (Turkey), Allmed, SZABIST, University of Karachi, Dr. Panjwani Center for Molecular Medicine and Drug Research, Dadabhoj Institute of Higher Education, Red Crescent, Dow University of Health Sciences, Aga Khan University and Liaquat National Hospital

IBHM provides in-house internships of six months duration to ensure that the students secure a placement that will support their learning requirements and nurture professional competence.

The students are being provided with a monthly stipend as per policy and as well as internship certificate at the end of internship period {annexure (ii)}.

From July 2019 to June 2020, total of 73 students of IBHM has applied for in-house internships at various departments of DUHS, from which 24 students have successfully placed and completed their internships successfully {annexure (i)}. While office order for the remaining 23 students is awaited.

Benefits of Internship for Students

The placement department offers paid internship for 6 months to graduates, who have applied for the internship and selected by the placement committee. They are benefited from the internship and are placed in different departments of DUHS after the approval of the Registrar, DUHS. The duration of internships are from May-October, according to the duty roster which was designed on rotational basis (2 months), was handed over the interns, before going to their relevant departments such as Registrar Head office, Finance, HR, OPD, Radiology, IHM and DDRRL. The purpose of offering them internship was to increase their career related knowledge and provide them valuable work experience.

6.6 Student Counseling and Career Guidance

DUHS Counseling Services for Students available at ION, Ground Floor, OJHA Campus and DMC, PDC building 1st floor.

If students are experiencing any of the following, DUHS has a provision for counseling services offered to our students.

- ✦ Counseling may offer them a safe and confidential non-judgmental support for their learning needs.
- ✦ A safe place to learn to be them, with holistic health counselling for their well-being
- ✦ Academic issues and stress/anxiety, time management
- ✦ Family related issues.
- ✦ A response to their learning disabilities or learning issues.
- ✦ Helping them to navigate change in their lives
- ✦ Issues with friends and other relationships

Furthermore, a student's Counseling Cell has been inaugurated by the Vice Chancellor DUHS, Honorable Prof. Dr. Saeed Quraishy on the occasion of World Mental Health Day at the Dr. A. Q. Khan Centre, Institute of Behavioral Sciences exclusively for Dow Students, where they can get free of cost further extensive treatment and services.

The Student Counseling Services are provided at the departmental level regarding academics, personnel or group counseling, crisis assessment/ management, career exploration and professional training guidelines. Student counseling is also offered through the official mentoring program at the Departmental/Collegiate level. Student Counseling involves meeting with and seeking help from a trained professional who can help you identify your strengths, weaknesses and interests regarding academic/career matters and also offer emotional support and guidance.

The Dow University of Health Sciences has hired an experienced Psychologist for student counseling services to be offered for its students. The professional has knowledge of student counseling/career guidance to students with a variety of issues, ranging from behavioral issues to career preparation. The professional will assist the students with Career and Academic Development and work directly with students to develop academic and career related solutions.

Dow University of Health Sciences wants all enrolled students to prosper in life and pursue the career of their interest. Thus, the students can count upon their Departmental Head or faculty members for guidance and mentorship.

The Institute of Physical Medicine and Rehabilitation IPM&R has a well-organized mentoring system at department to provide counseling, guidance and appropriate suggestions to students to rectify their academic, personal and other issues to improve the quality.

There are two modes of student counseling are used in IBHM:

- Educational and Career counselling offered in all campuses.
- Personal or Psychological counseling is being provided by professional psychologists through A. Q Khan Center Center for Behavioral Sciences.
- Academic or career counseling is being provided by faculty members. Batch counselors are allotted, who look after the whole batch and provide all kind of counseling regarding student progression, selection of electives and participation in curricular and co-curricular activities.

Student-teacher interaction also helps us ascertain students' need for career counseling. Teachers and management personnel are always available to the students to hear to their queries. Additionally Dow College of Pharmacy has developed a system of mentoring, which may serve as a platform for addressing needs of the students. Other Colleges & Institutes also have a well-developed mentoring system. In the mentoring system of DUHS, there are assigned mentors for every 20 students and a chief mentor to lead all the mentors. Apart from this they also periodically organize career counseling sessions in which experts from the industry are invited to guide students.



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CHAPTER 7

**Strengthening
Physical
Infrastructure**

Directorate of Planning & Development

The Department of Planning and Development of Dow University has completed renovations and refurbishments of old Dow Medical College and a number of old buildings and infrastructure at the Ojha campus.

7.1 Development Projects (Laboratories, Libraries etc.)

Following development projects are being implemented at Dow University of Health Sciences

S.No	Project Title	Funded by
1	Strengthening of Oral Health Sciences and Support Facilities at Dow University of Health Sciences, Karachi. (On-going)	PSDP
2	Establishment of Trauma Centre, BSL -3 Lab and Provision of support services at Institute of Chest Diseases Ojha Campus of Dow University of Health Sciences, Karachi	ADP
3	Strengthening of Institute of Physical Medicine and Rehabilitation of Disable at DUHS, Karachi.	ADP
4	Establishment ADP of Department of Serobiological and providing power generation by gas along with heat recovery system at ojha campus of DUHS, Karachi.	ADP
5	Establishment of 50 Bedded Hospital / Maternity Home in Gulistan-e-Johar, Gulshan-e-Iqbal Town, Karachi.	ADP
6	100 Bedded Hospital/ Maternity Home Eidgah, Karachi.	ADP
7	200 Bedded Hospital / Sindh Infectious Diseases Hospital & Research Centre at NIPA, Gulshan-e-Iqbal, Karachi.	ADP

PSDP PROJECTS:

Strengthening of Oral Health Sciences and Support Facilities at Dow University of Health Sciences, Karachi. (On-going)

The scope of the project is almost completed and building is functional. The project falls under the head "Infra Structure Development" funded by Higher Education Commission. The project is a part of overall vision/ perspective plan of the Dow University of Health Sciences Karachi which is in line with the government priorities for the development, expansion, up-gradation and improvement of essentially required infrastructure and research facilities at Public Sector Universities and degree awarding institutions. The project's duration is 4 years i.e. 2015-2019. and total cost is 640.209 M. in which DUHS contributed share is 150.000 M and the expenditure incurred till July 2019-2020 is 626.760 M.

ADP SCHEMES:

Establishment of Trauma Centre, BSL -3 Lab and Provision of support services at Institute Chest Diseases Ojha Campus of Dow University of Health Sciences, Karachi

The subjected Ongoing scheme is a multidisciplinary 200 bedded Emergency Care Centre. It will be equipped with the most modern technology for diagnosis & treatment having operational theaters, Surgical & Medical ICUS and other allied essential services for treatment of seriously injured patients round the clock. The total cost of the scheme is amounting to Rs 681.284 Million. The expenditure incurred till July 2019-2020 is 361.313 M. BSL3 Lab Building is completed and handed over.

Strengthening of Institute of Physical Medicine and Rehabilitation of Disabled at DUHS, Karachi

The subjected scheme i.e., IPM&R is fully functional & operational. IPM&R is providing Rehabilitation services to the patients of stroke, Arthritis, Polio & other disabilities. It provides comprehensive multidisciplinary rehabilitation services with state of the art facilities to help patients in various disabilities. Patients not only from Karachi but also from Thatta, Hyderabad, Jamshoro, Dadu and from entire provinces of Pakistan came here and get the free of cost treatment and best services. It is worth mentioning here that it's the only Public Rehabilitation center in Sindh, one such center is existing in Rawalpindi which is exclusively for defense services. It was therefore felt necessary to have such institute in Pakistan for civilians also. IPM&R at Dow University of Health Sciences, Karachi is first ever institute for civilian public sector in the country. Total cost of the project is 244.376 M and the expenditure incurred till July 2019-2020 is 122.903 M.

Establishment of Department of Serobiological and providing power generation by gas along with heat recovery system at OJHA campus of DUHS, Karachi

The subjected ongoing scheme is a mix of preventive, curative, education and research services. Structure is completed only supply of Medical equipment are in process The Serology Department will have animal serology laboratory which will produce various immunoglobulin and antibodies for various human diseases and ailments. Human serology laboratory will be capable of diagnostic of various diseases. Serology Research and development unit will be a helping hand for production and diagnostic laboratories. In Pakistan there is no single serology institute which could produce indigenous quality sera for sero therapy, diagnostic and reference. An indigenously produced serum is very cheap, economical and local production will not only save foreign exchange in billions of Pak Rupees, but also provide opportunity for employments. Total cost is 410.265 M and the expenditure incurred till July 2019-2020 is 281.271 M.

Establishment of 50 Bedded Hospital / Maternity Home in Gulistan-e-Johar, Gulshan-e-Iqbal Town, Karachi.

This on-going development scheme is aimed at delivering the secondary level health care services to the people of Gulistan-e-Johar Karachi and its surrounding. Dow University of Health Sciences is offering to provide the health care services of tertiary care level and well equipped

with professional Human resources, latest invention of machinery, equipment etc. where diagnostic and advance radiological facilities are being delivered satisfactorily.

100 Bedded Hospital/ Maternity Home (IVF) Eidgah, Karachi

This on-going scheme of DOW University of Health Sciences has mother & child health Centre with 4th unit of Gynae ward (100 Bedded Eidgah Maternity Home) with additional facility of IVF (in Vitro Fertilization) and establishment of Neonatology. It is made fully functionary /Equipment etc. as well as IVF unit & Neonatology special service is established there which does not exist elsewhere in public sector institution.

Sindh Infectious Diseases Hospital & Research Centre at NIPA, Gulshan-e-Iqbal, Karachi

Gulshan-e-Iqbal Town is spread on vast area, patients of this area have no easy access to public sector major hospitals located in the City such as Civil Hospital, Jinnah Hospital, as well as NICVD due to Traffic rush. Everybody is unable to afford the medical expenses of Private Hospital, hence Health Department, Government of Sindh have considered this genuine demand of public for establishment of The Sindh Infectious Disease Control Hospital & Research Centre at Gulshan-e-Iqbal, Karachi, where all facilities of Major Infectious and General OPD and consulting clinics will be made available round the clock. Radiology, Laboratory, Bio-Chemistry / Urine Analysis, Bacteriology as well as Bio Safety labs/ Research centers ICU/HDU Facilities are required to be established through this scheme, beside these facilities, Emergency Department Central oxygen unit, HVAC System, Fire Alarm system, Fire Fighting system, Public Address system, Nurse Call system, CCTV system, DATA System & BIMS system will be provided to the proposed Hospital the gigantic medical health facilities specially for the people of Gulshan-e-Iqbal. Town and generally for the legitimate public of Karachi.

7.2 Research Equipment

Dow University of Health Sciences has modern research equipment which is available for faculty and students to facilitate them in their research work.

7.3 Construction Projects:

1. Strengthening of Oral Health Sciences and Support Facilities at Dow University of Health Sciences, Karachi. (On-going)
2. Establishment of Trauma Centre, BSL -3 Lab and Provision of support services at Institute of Chest Diseases Ojha Campus of Dow University of Health Sciences, Karachi
3. Strengthening of Institute of Physical Medicine and Rehabilitation of Disabled at DUHS, Karachi.
4. Establishment of Department of Serobiological and providing power generation by gas along with heat recovery system at Ojha campus of DUHS, Karachi.
5. Establishment of 50 Bedded Hospital / Maternity Home in Gulistan-e-Johar, Gulshan-e-Iqbal Town, Karachi
6. 100 Bedded Hospital/ Maternity Home Eidgah, Karachi
7. 200 Bedded Hospital / Sindh Infectious Diseases Hospital & Research Centre at NIPA, Gulshan-e-Iqbal, Karachi



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CHAPTER 8

**Strengthening
Technological
Infrastructure**

8.1 Digital Library

Digital Library program was propelled by HEC to help researchers and mentor at public sector universities. Digital Libraries developed by Dow University of Health Sciences in their various campuses and institutes give access to global insightful writing in view of online delivery, peer-reviewed journals, databases, articles and e-books crosswise over extensive variety of controls. Through HEC's digital library which is available from all computerized libraries built up in DUHS, clients can get to more than 75,000 electronic substances. Taking after are the rundown of digital libraries at various campuses of Dow University of Health Sciences alongside the quantity of accessible systems.

- Main Digital Library (Ojha Campus) – 155 Computer Systems
- Digital Library (DMC Campus) – 122 Computer Systems
- Digital Library (Institute of Nursing) – 40 Computer Systems
- Digital Library (Institute of Health Management) – 11 Systems
- Digital Library (Dow College of Pharmacy) – 07 Computer Systems
- Digital Library (Institute of Physical Medicine and Rehabilitation) – 12 Computer Systems

8.2 PERN (Pakistan Education and Research Network)

PERN was initially launched in year 2002 as a part of IT action plan providing Internet facility and interconnectivity between universities for data bank integration, research collaboration and upgrade learning and teaching skills. Dow University of Health Sciences receives a total of 92 MBPS in DMC and Ojha Campus, DUHS is acquiring the services of PERN-II Network. The bandwidth is further distributed to all other campuses.

Pakistan Education & Research Network (PERN) is offering alliance services on the equity model to the education and research community of Pakistan. Including, high speed internet, in addition to PERN, there is the following addition:

- 1Gbps intranet link
- Academic Social Networking
- eduroam (federated Wi-Fi network authentication)
- Local content hosting, for the partner universities/ institutes.

Through PERN we have acquired:

- 607Mbps internet bandwidth:
- 40 Mbps Intranet bandwidth and
- 48 Live IP Addresses

The internet bandwidth is divided between

- DMC (82Mbps) and
- Ojha(525Mbps) campus

Smart University Wi-Fi project has been deployed in OJHA campus which is also consuming internet bandwidth.

8.3 Video Conferencing

Conferences conducted in the designated Seminar Halls/Rooms, Faculty Meeting Rooms of each department, VC Board Room at OJHA and DMC Campus.

This facility is provided by the information technology department in all campuses. It is being used in different domains within the campus needs and promoting flexible learning utilize by both faculty and students.

- Clary Icon (PC based web conferencing) setup is installed in Ojha Campus for advance conferencing. Huawei TE-50 is installed at the Video Conferencing hall at Head Office DMC Campus.
- Tandberg (Cisco) 990 MXP (Multiple unit supporting up to 4 sites) is deployed in VC Board Room, DMC campus. Polycom PVX software is utilized in Ojha Campus for seamless video conferencing and web conferencing experience; which works on H-323 protocol.
- Web-based Conferencing such as International Days, Seminars and other Medical events are being utilized under the web streaming's of HEC Pexip Infinity Connect, Zoom Webinars, Facebook 'go live', Hangouts and Google Meet.
- APPNA Merit training, CTU (CRCP and CRC) classes, HEC workshops, interviews and official meeting are usually conducted through Cisco WebEx facility of DUHS.

8.4 Campus Management Solution (CMS)

DUHS is aimed at providing students, faculty, and staff with immediate access to real-time information and connects that information to specific action. CMS is logically divided into several modules each of which maps to a university function/department. DUHS worked closely with the HEC (Higher Education Commission) and "Campus Management Solution" project was initiated. Higher Education Commission selected six public sector universities for the implementation of Oracle People Soft Campus Solutions.

The Campus Management software is an integrated solution which takes care of the various activities of an educational institution like institution management, student management, administrative functions, etc. The solution is available as a basic integrated application upgradeable to an Intranet / Internet system.

Oracle Corporation has a customized ERP Solution for academic institutions i.e. Campus Management or Student Information System. The solution is a combination of software and hardware. It helps manage the business processes of an academic institute in an efficient and professional manner. The integration between various processes and departments i.e. admissions (electronic and manual), enrolment, examination, fees etc. helps in automating the manual and traditional methods of functioning of a campus.

CMS Features

- The security levels can be administered at three levels.
- CMS make easier to prepare and generate reports from different required aspects.
- The web-based features enable the faculty, students as well as the management to interact.
- The management has the option to set user's right of the end user, depending on the role and job responsibility.
- The application generates various reports useful to the management, to the faculty and to the end user separately, for each module.

8.5 Web Portal of DUHS

The Website of Dow University of Health Sciences assists in the timely update of news, events, information on the official website of the university which is managed by IT department. It provides all the information regarding admissions, curriculum, examination and events planned in the university. Following facility are provided through web portal.

- Faculty profiles
- Microsoft for all users
- Tenders and Admissions
- Accessibility to DUHS official email.
- Curriculum and course outline of MBBS
- DUHS CME (Continuous Medical Education)
- Alumni Association Webpage for Connecting with Dow
- Professional development center workshops schedule
- JDUHS (Journal of Dow University of Health Sciences)
- Individual academic programs and Colleges/ Institutes and Health Services Data/ Information

8.6 Online Admission System

Online admissions assist in reducing work load, avoid data entry mistakes and of course in keeping up to date record by electronic means. DUHS announces admissions in different programs; online admission assists in form filling over the website, provision of electronic copy of prospectus along with related information, eligibility criteria & fee structure of the courses, day to day updates and news alerts about admissions, entry test & interview dates announcements, display of online Merit list.

8.7 Cloud Services for Academics: [Dissemination of Student Account IDs](#)

As part of the ICT Directorate's overall initiative to facilitate and enhance the learning experience at DUHS, the Microsoft Office365 cloud platform has been acquired and disseminated to the students: It will enable collaboration among faculty & students. The services being offered through this platform are:

- Outlook for Email
- MS Office Online
- Microsoft Teams as collaborative workspace

- Microsoft Planner for teamwork planning
- Skype for Audio/Video Conference
- Yammer for social networking, etc.

To initiate the use of this platform, online accounts have been created for students. Roll out activities are being planned to hand-over these accounts to the students & give them a brief overview.

8.8 Dow Connect

Dow Connect is connecting all departments with our people, across DUHS and also serves as a student grievance portal. In order to streamline requests and better serve you:

1. We utilize a **Dow Connect System** to solve your issues as early as possible.
2. Every request is assigned a unique number which you can use to track the progress and responses online.
3. For your reference we provide complete archives and history of all your requests.
4. A valid email address is required to submit a request through the following features:

- **Ticket Filters**

Define rules to route incoming tickets to the right department, concerning officer, as well as trigger actions.

By using the filter system, Dow Connect empowers you to automate the creation and routing of tickets. Set actions such as ticket rejection, department/concerning officer assignment or even send an automated canned response. Rule criteria of filter can include any custom field added to the forms as well as user data.

- **Assign, Transfer & Referral**

Transfer tickets between departments to make sure it's being handled by the correct concerning officer or assign tickets to a particular department or team of agents.

Refer a ticket to maintain view-only access to tickets when transferred or assigned to a department/officer. Tickets can be auto assigned by help topics or departments when they arrive, but what if they need to be reassigned? No problem! You can reassign tickets to agents or a team of agents or transfer to a different department all together. Transfer, Assignment, and Referral notes are logged in the ticket thread to keep track of what's happened in the ticket.

- **Auto-Responder**

Configurable automatic reply sent out when a new ticket is opened, or a message is received. Auto responses can be formatted to pull information from the ticket to personalize the email. Dow Connect supports placeholder variables which will pull the user's first name in the auto response. Auto responses can be edited and customized for each department as well as associated with Help Topics.

- **[Thread Action](#)**

Officers now have the ability to create a Ticket or Task from a Ticket's thread entry or from a Task's thread entry. Need to create a separate ticket or task from a user's message to separate or expand on that item? No problem! Now with thread action, agents can simply create a new ticket or task with the message and keep it in the original ticket thread. Thread actions are noted in the original ticket thread with reference to both the new item as well as the thread item it was pulled from.

- **[Tasks: Create an Internal to-do list for Agents](#)**

Tasks can be associated with tickets or they can stand alone in the help desk. When tasks are ticket-related, this prevents the tickets from being closed until all tasks within the ticket are complete. Add collaborators to include external users to the task items while keeping them separate from the ticket thread and contents.

[Please follow DOW Connect Portal Link to register your complaint](#)

[HTTP://DC.DUHS.EDU.PK/INDEX.PHP](http://dc.duhs.edu.pk/index.php)



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CHAPTER 9

**University Building
Communities**

9.1 University-Community Interaction

University and Community Interactions in 2019-2020	
Visit to Bint-e-Fatima Old Age Home by undergraduate students	Community Service, Community Building Activity of Dow Institute of Business and Health Management (IBHM)
Accumulation of essentials for Wedding Arrangement of an individual belonging to Underprivileged family by undergraduate students as part of community service activities	
Dispersion of cash & essentials to deprived families/individuals in wake of covid-19 by undergraduate students	
IBHM had initiated a 4 weeks' mandatory community service for its graduates for making them responsive to community needs and to make them responsible citizens	
Breast Cancer Awareness Day	Community Service and Community Building Activities of Dow International Medical College (DIMC)
Awareness Session on Smart Use of Antibiotics	
Typhoid Awareness Seminar	
International Epilepsy Day	
The satellite center of MALIR became fully functional with well-equipped MRI, CT, Ultrasound and X-Ray machines	Community Service and Community Building Activities of Dow Institute of Radiology (DIR)
Spine Imaging Workshop series Hitachi Medical Systems Singapore	
Pneumonia Awareness seminars at Public Health Schools	
Connecting with youth: Smart Phone App Project	Community Service and Community Building Activities of Dow School of Public Health (SPH)
Empowering Rural Community: Baluchistan Nutrition project for mothers and children: Behavior change communication pilot project plan	
School Health Nutrition Program: "Association between Micronutrient's Levels and Cardiovascular Risk Factors among Pakistani Adolescents"	
Local schools visit to provide knowledge regarding basic oral dental care.	Community Service and Community Building Activities of Dow Dental College (DDC)
Orphanage visit at Ibrahim Hyderi	

Public awareness on COVID-19 campaign.	Community Service and Community Building Activities of Dow Institute of Medical Technology (DIMIT)
Corona Virus Health and Safety Guide	
Public awareness on COVID-19 campaign.	
Recognizing Symptoms of COVID	
Mental Health Matters	
Public Awareness Seminar on mental health	
Azme Aali Shan TV Program Conducted on TV ONE to teach Iyari Students as Dow Faculty	

9.2 University Role in Building Community

The Dow University of Health Sciences, since its inception has been focusing on community services to provide preventive, diagnostic and treatment facilities for community health care specially to the under privileged class. The students of various undergraduate and postgraduate programs of DUHS are also actively involved with the faculty members in all the Civic Engagements of DUHS.

Advanced Research Lab, Dow Dental College

It is situated on 7th floor of DDC. It was constructed with a help of a grant from HEC. Following research facilities are available.

1. Cell Culture Lab
2. Microbial Culture lab
3. Advanced Bio-Materials Lab
 - Scanning Electron Microscope
 - Universal Testing machine
 - HPLC
 - Thermal Cyclor
 - Stereo-Microscope
 - Microtome
4. Molecular Pathology lab
 - PCR
 - ELISA
 - Gel Electrophoresis

The Bio-materials side of the lab is fulfilling an important research need of the scientific community. Its importance can be gauged from the fact the SEM installed in the lab is only the third such microscope in Karachi after NED university and PCSIR available for research purpose. In addition, the Universal testing machine is a first of its kind for any educational institute.

9.3 Alumni Affairs: Outstanding Achievements

Alumni from Dow University of Health Sciences are serving in various medical and allied health sciences of national as well international repute.

International Alumni Outstanding Achievements

Over 3000 graduates of Dow University of Health Sciences are practicing in various medical institutions of USA, UK, KSA and other countries. Majority of them are supervising the different medical departments, contributing in the medical researches and in their respective fields as alumni of DUHS:

Prominent Alumni of DUHS, Karachi

Prof. Shahed Quraishi is President of the Royal Society of British Medicine (ENT Section) and became the first Pakistani ever to get appointed at this post. Prof Shahed Quraishi OBE is a Consultant ENT surgeon and Head & Neck Surgeon who graduated from the Dow Medical College, Karachi class of 1985, and has been working in Britain's National Health Service (NHS) for nearly 31 years. In November 2017, Dr Quraishi was awarded the title of 'Officer of the British Empire' (OBE) by Her Majesty the Queen Elizabeth II at Buckingham Palace in recognition of his services to the NHS and Medical Education. He was also given the National Award for Clinical Excellence by the NHS in 2015. Prof Quraishi is the founder of ENT Masterclass, UK, which is the world's biggest and free ENT teaching platform currently working in 12 countries across 4 continents including Pakistan. He is a prominent alumni of Dow Medical College.



Dr. Azra Raza is the Chan Soon-Shiong Professor of Medicine and Director of Myelodysplastic Syndrome (MDS) Center at Columbia University. She is the author "*The First Cell: And the Human Costs of Pursuing Cancer to the Last*". She is an accomplished scientist who supervise a state-of-the-art basic research lab and a Tissue Repository of blood and marrow samples collected since 1984. Raza's research focuses on myelodysplastic syndrome and acute myeloid leukemia. She is considered an international authority on pre-leukemia (MDS) and acute leukemia and is one of those rare physician-scientists who divide their time equally between caring for patients and supervising. She did her MBBS from Dow Medical College, Karachi (1977).



Dr. Tasneem Naqvi is a Cardiologist in Scottsdale, Arizona and is affiliated with multiple hospitals in the area, including Mayo Clinic Hospital and Mayo Clinic Hospital - Rochester. She is also Associate Director of the Cardiac Noninvasive Laboratory and Director of Interventional Echocardiography at Cedars-Sinai Medical Center in the division of Cardiology. Dr. Naqvi is also Assistant Professor of medicine at the David Geffen School of Medicine at University of Los Angeles (UCLA). She is board certified by the American Board of Internal Medicine, American Board of Cardiovascular disease, National Board of Echocardiography and Society of Vascular Technology. She received her medical degree from the renowned Dow Medical College in 1984, which is now the Dow University of Health Sciences, Karachi.



Prof. Teepu Siddique is a neurologist and scientist known for his ground-breaking discoveries concerning genetic and molecular abnormalities. He was head of the team that discovered the cause behind the mysterious and deadly disorder known as amyotrophic lateral sclerosis (ALS). He studied at Dow Medical College in Karachi, where he earned his medical degree in 1973 before moving to the USA. He was a Prof of neurology and cell and molecular biology at Northwestern University's Feinberg School of Medicine before becoming director of the university's division of neuromuscular medicine.



Professor Syed Hasan Arshad is a consultant, Physician at Southampton University Hospital Trust and Director of The David Hide Asthma and Allergy Research Centre in Isle of Wight. He was appointed to the Chair of Allergy and Clinical Immunology in 2009. He received his MBBS degree from Dow Medical College, Karachi, class of 1979. He is also a member of the expert panel of the National Institute of Health (US), to review grants and formulate strategy for research. He was awarded Pfizer Visiting Professor to the Michigan State University, Michigan, USA in 2004 and recently his David Hide Centre team won the "excellence in research" award at the Isle of Wight NHS Trust annual award ceremony. In 2015, he was awarded the prestigious Jack Pepys award by the British Society of Allergy & Clinical Immunology of outstanding contribution to the science of allergy and immunology. In 2015, he was awarded the prestigious Jack Pepys award by the British Society of Allergy & Clinical Immunology of outstanding contribution to the science of allergy and immunology.



Dr. Asif Hasan is a consultant cardiothoracic surgeon and the current director of the cardiac and pulmonary transplant program at Freeman Hospital. His special interests include transplantation and mechanical circulatory support as treatment modalities for congenital heart disease.

Dr. Hasan graduated from the Dow Medical College in 1979, and has been widely recognized for his expertise in both adult and paediatric transplantation in both academic and clinical settings. He is a member of the Society of Cardiothoracic Surgery in Great Britain and Ireland, as well as the Cardiothoracic Surgery Network.



Dr. Syed Wamique Yusuf is a Professor of Medicine at the University of Texas MD Anderson Cancer Center. He obtained his medical degree from Dow Medical College in Karachi, class of 1986, and pursued his Internal Medicine training in the United Kingdom. He is a member of the Royal College of Physicians of Ireland and a fellow of the American College of Cardiology. He serves as the Director of the Cardiology Fellowship Program and the Program Co-Director for the ACC Cardiovascular Board Review.



Dr. Kamran Asdar Ali is currently an AIPS Institutional Trustee and was the AIPS President from 2011-2017. Dr. Ali was elected the Vice President of the Association of Asian Studies (AAS). Dr. Ali is the Dean of the Mushtaq Ahmad Gurmani School of Humanities and Social Sciences (MGSHSS) at LUMS. Before joining LUMS, Dr. Ali was a professor of Anthropology, Middle East Studies and Asian Studies at the University of Texas, Austin. He has conducted field research in Mexico, Egypt and in Pakistan on issues pertaining to health and gender, ethnicity, class politics, sexuality and popular culture. He was the graduate of class 1986, Dow Medical College, Karachi.



Dr. Natasha Mirza, MD is Professor of Otolaryngology at the University of Pennsylvania and Director of the Penn Voice and Swallowing Center. She is a member of multiple national committees and is active in teaching. She is co-founder of a medical device for recording endoscopic images and is developing the department's telemedicine program. She earned her medical degree from Dow Medical College, Karachi in 1983.



Dr. Nurjehan Quraishy (Nephrology Specialist) is section head at Cleveland Clinic South Pointe Hospital. She is also Clinical Assistant Professor University of Toledo HSC Department of Pathology. Dr. Quraishy is board certified in Anatomic & Clinical Pathology. She graduated from Dow College Medical in 1975.



National Alumni: Outstanding Achievements

A large number of graduates of Dow University of Health Sciences are serving humanity throughout the country and hold key posts. Majority of them are the heads of various health care institutions.

Graduates of Dow College of Pharmacy are rendering their services in highly reputable private and public sector organizations. Some notable entities where alumni of our institute are performing their duties include Drug regulatory authority of Pakistan, Aga Khan University Hospital, South city Hospital, NMC Hospital, NIBD, Kiran Hospital, Indus Hospital Korangi, leading pharmaceutical manufacturing companies and many others.

Our alumni have been outperforming alumni from other universities in various fields, one such example is AKUH entrance test for internship programs, where our alumni have been performing extraordinarily each year.

Several graduates are also playing their roles in industrial pharmacy and working in multinational and local pharmaceutical industries including Abbot, GSK, Brookes Pharma (Private) Limited, Bosch Pharmaceuticals, The Searle Company Ltd., Hilton Pharma (Pvt) Ltd, AGP Limited, among many others.

Prominent Alumni within Pakistan:

Dr. Syed Adeebul Hasan Rizvi – Founder of Sindh Institute of Urology and Transplantation

Syed Adeebul Hasan Rizvi is a Pakistani philanthropist, Renal transplant surgeon and the founder of the Sindh institution of urology and transplantation (SIUT), the largest kidney transplant center in Pakistan.

He graduated from Dow Medical College in Karachi, Pakistan in 1968. SIUT started as an eight-bed ward at Civil Hospital, Karachi, and has grown to be Pakistan's leading & largest Urology and Transplantation Institute. Dr. Adeeb Rizvi is the president of the Transplant Society of Pakistan.

In 2003 Dr Adeeb rizvi led a team of SIUT surgeons that performed the first successful liver transplant on an infant in Pakistan which was a big milestone for SIUT and the health department of Pakistan.



Dr. Syed Baqar Askary – Founder of Fatima Jinnah Dental College, Karachi. Syed Baqar Askary fondly known as Dr. Askary is the Founder Trustee and CEO of Fatima Jinnah Dental College (FJDC), Karachi. Baqar Askary is a medical graduate of 1966, of Dow Medical College, Karachi Pakistan. Baqar Askary a senior medical practitioner and an educationist. FJDC founded in 1992 is a pioneer institution devoted to the teaching of dentistry. The college is named "Fatima Jinnah Dental College" to pay respects and dedicated



to Mohtarma Fatima Jinnah, one of the pioneers of Pakistan and sister of Mohammad Ali Jinnah, the founder of Pakistan.

Dr. Asim Jamal – Country Chair and MD, Sanofi Aventis

A medical graduate from Dow Medical College, University of Karachi from 1991; He has been operating in the healthcare sector since 1991 when he began his career as a General Practitioner & House Officer (Medicine & Surgery) in Pakistan. Dr. Asim is Member Board of Governors LUMS, Member DUHS (Dow University of Health Sciences) Board of Studies of Institute of Health Management, Director PFBA (Pakistan France Business Alliance).



Dr. Farhat Abbas is the Associate Vice Provost, Special Projects at the Aga Khan University Hospital & The Hussein Cumber Professor, Section of Urology, Department of Surgery; He is also serving as the Dean, Medical College at AKU, Karachi, He is a prominent alumni of Dow Medical College, Karachi from the class of 1984.





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CHAPTER 10

Sports

10.1 Inter-Departmental Sports

Annual Sports 2020 was successfully conducted from 3rd February to 28th March 2020. The students of 13 constituent Colleges/ Institutes namely Dow Medical College (DMC), Dow International Medical College (DIMC), Dr. Ishrat-ul-Ebad Khan Institute of Oral Health Sciences (DIKIOHS), Dow International Dental College (DIDC), Dow Dental College (DDC), Dow College of Pharmacy (DCOP), Institute of Business and Health Management (IBHM), Institute of Medical Technology (IMT), Institute of Physical Medicine and Rehabilitation (IPM&R) and Institute of Nursing (ION), Dow Institute of Radiology (DIR) Dow College of Biotechnology (DCOB) and School of Public Health (SPH) participated with great enthusiasm. Color coded shirts and flags were provided to the students representing the respective institutes. The girls and boys enthusiastically participated equally in all events despite the fact that they are not regular athletes.

Every year we schedule Sports Week so that the maximum numbers of students and faculty can participate in healthy activities. State of art gymnasium and cricket ground has been provided by Dow University where the students play after college hours. We have planned to have regular sessions for trained students with expert coaches who can groom these players to shine nationally and internationally. During last few years with the growth of the university, the faculty enhancement has also taken place. Therefore we also held faculty matches in which most of them participated with enthusiasm.

Diverse sorts of sports occasions keep understudies and indeed workforce physically fit and active; whereas, debate, sporting excellence and challenges improve their soul and heart. Sports exercises and vibrant social schedule and useful network of support throughout the year provide a warm welcoming environment for students and faculty as well. These activities instill them with great communication skills, administrative skills, Leadership skills, Team work, and capacity to nimbly acknowledge their failures and majestically celebrate their victory.

DUHS sporting commitments from fitness facilitation to regular training sessions provides support to athletes so they can progress to the highest sporting level whilst studying at Dow University of Health Sciences. During the sports week various events took place like Naat, Qirat, English and Urdu Debates, Declamation contest, Literary Festival etc.

Outdoor track events like cricket (for both boys and girls), Football, Races, Shot put, Javelin Throw etc. Indoor events, like Basket Ball, Throw ball, Netball, Badminton, and Table Tennis are held in the state of art Gymnasium at Ojha Campus. The entire rigorous and challenging event was supervised and evaluated by the esteemed Judges of respective fields.

Prize Distribution ceremony was conducted on 18TH February 2019. The Chief Guest was Hakim Ali Talpur from HEC warmly welcomed by the Director Sports, Pro Vice Chancellor Dr. Zarnaz Wahid, Registrar, All Principals, Faculty and staff. The House Cup trophy was won by Dow Medical College with 7 winner and 3 runner ups.

- Cricket Match Boys played at Ojha Ground between 13 departments. Institute of Nursing (ION) acquired 1st position and Institute of Physical Medicine & Rehabilitation (IPM&R) found to be runner up of the tournament.
- Cricket Match Girls played between 13 departments of DUHS. Institute of Physical Medicine & Rehabilitation (IPM&R) won the match against Dow College of Pharmacy (DCOP).

Fitness & Sports Rehab Center

DUHS provides fitness and sports facilitation for the professional development. The center offers the following:

1. Geriatric Rehab Services
2. Providing Fitness Training
3. Neuro Rehab, Ortho Rehab
4. Weight Management (Fat reduction)
5. Weight Maintenance and Weight gain

10.2 Participation in National Championships

21ST and 27th All Pakistan Parliamentary Debating Championship

Student from DUHS in form of two groups A and B participated in the event of public speaking competition organized by King Edward Medical University (KEMU) on February 14th till February 20th, 2020 and University of Engineering and Technology (UET) during February 21st till February 24th, 2020 Lahore.

In the Declamation Contest at KEMU two teams and two individual speakers participated. Both the teams qualified the final round where as Ms.Wania Noor became the finalist in the English serious category, Mr. Taha Ahmed won the competition as the 3rd best speaker in Urdu serious category and Ms. Noor-ul-Elmah Hassan made her place in top 20 best speakers by winning the consecutive two rounds and acquiring the title of “Best Speaker” as an individual speaker at the event.

Both the teams of DUHS participated actively in all four rounds of the completion on 27th UET All Pakistan Declamation and Debating Championship. Team-A found to be qualified for the quarter final round in open in open category as 12th best team in the parliamentary round. Whilst, both the teams secured 9th and 10th position respectively. The students have been given laurels for their efforts on behalf of the University.

10.3 Achievement at Regional /National levels

3rd Annual Inter Universities – Aga Khan Sports Olympiad

Students of DUHS participated in 3rd Annual Inter University AKU Olympiad Karachi in different sports like basketball, badminton, volleyball and football.

- DUHS secured the 1st position in basketball match between Ziauddin University and DUHS.
- Mohammad Farris Fayaz acquired the title of “Best Basketball Player”.
- DUHS found to be runner up in both the match football and volleyball at AKU Olympiad.

10.4 Honors & Awards to Winners

DUHS awards special shields and certificates of appreciation to the winners of different sports and co-curricular / extra-curricular activities contests held at regional and / or national level.

Medallions and shields are also awarded to the winners of inter departmental sports/ contest winners.



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CHAPTER 11

**University Building
Leadership**

11.1 Faculty Leadership

Awards and Representation in Government Policy making committees, memberships on various councils etc.

Faculty Leadership Awards of faculty members are mentioned below:

Name of Faculty Member	Title of Award	Year	Name of Org.
Dr. Sumbul Shamim	Productive Scientist of Pakistan	2008-present	Pakistan Council for Science and technology. Govt of Pakistan

Representation in Govt. Policy Making Committee (FY 2019-20)

Name of Faculty Member	Name of Committee / Representation	Name of Org.
Prof. Nisar Ahmed Rao	National Strategic Plan to End TB 2020-23	National Health Services Regulations and Coordination
	TB Clinical Diagnosis Audit Proposal in Country Context	The Common Management Unit of (HIV/AIDS, TB & Malaria)
Dr. Saifullah Baig	Strategic Treatment Advisory Group (STAG)	National TB Control Program Ministry of Health, Pakistan.
Dr. Saeed Akhtar	Member	DPT National Curriculum Review Committee (NCRC) HEC
Prof. Noor Jahan	Secretary	Pakistan Pharmacist Association (PPA) Central

Membership in Various Associations/Councils (FY 2019-20)

Name of Faculty Member	Status	Name of Council
Prof. M. Saeed Quraishy	President, PSG & GIE	Pakistan Society of Gastroenterology & GI Endoscopy

Atiq ur Rehman	Board of Directors	Pakistan Society Therapy Association (PPTA)
Umesh Kumar	Information Secretary	PPTA (Sindh Chapter)
Prof. Ambrina Qureshi	Reviewer Honorary Editorial Board	Scientific Manuscripts published by PLOS-One, Elsevier and JPDA. Journal of Pakistan Dental Association.
Prof. Dr. Arshad Hasan	Migration PMDC Syndicate, IRB, Committee	Pakistan Medical Commission
Rabya Munawar	Ex. Executive member	Pharmacy Council of Sindh
Wajiha Gul	Editorial Board Member	ARC Journal of Pharmaceutical Sciences
Dr. Naresh Kumar	Co-opted member Standing Recognition Committee (Dental)	Pakistan Medical Commission (PMC)
Dr. Ramsha Khan	Member	American Society of Microbiology (ASM) Pakistan Biological Safety Association Health Security Partners Futures Fellowship (HSP)
Dr. Meha Fatima Aftab	Member Board Member	Mediterranean Neuroscience Society Pharmacology, Baqai Medical University
Dr. Izhar Hussain	Member Chairman	Peer review committee of National Business Education Accreditation Council (NBEAC). Institute of financial markets of Pakistan (IFMP)
Dr. Faryal Salman	Member	Peer review committee of National Business Education Accreditation Council (NBEAC)
Dr. Asif Qureshi	Member	American Society of Microbiology American Association of Molecular Pathology. Karachi Cancer Registry

		Pakistan Biological Safety Association.
Dr. Ambreen Fatima	Member	Medical Microbiology & Infectious Diseases Society of Pakistan American Society of Microbiology Pakistan Biological Safety Association
Dr. Fouzia Zeeshan	Member	American Society of Microbiology. Pakistan Biological Safety Association. Pakistan Society of Microbiology
Prof. Dr. Uzma Bukhari	Member	Pakistan Association of Pathologist
Dr. Fatima Fasih	Member	Medical Microbiology & Infectious Disease society of Pakistan
Prof. Dr. Uzma Bukhari	Member	Pakistan Association of Pathologist
Dr. Faksheena Anjum	Member	Pakistan Pharmacists Association, Sindh Chapter.
Dr. Sumbul Shamim	Member	Independent Ethics Committee (IEC) International Centre for Chemical and Biological Sciences (ICCBS) Dr. Panjwani Centre for Molecular and Drug Research (PCMD), University of Karachi. American Society of Gene and Cell Therapy (ASGCT) American Society of Experimental Pharmacology and Therapeutics (ASPET)
Dr. Shuja Farrukh	President	PSOL, Sindh Chapter
Prof. Muhammad Arif Mateen	Member Overseas Member	Association of Paediatrics Surgeons of Pakistan (APSP) British Association of Paediatric Surgeons Pakistan Association of Paediatric Nephrologists
Dr. Muhammad Sajjad Ashraf	Member	Association of Paediatrics Surgeons of Pakistan (APSP)

Dr. Syed Waqas Ali	Member	Association of Paediatrics Surgeons of Pakistan (APSP)

11.2 Student Leadership

Co-curricular Activities: University Dramas, Exhibitions, Expos, Competitions & Debates at National and International Levels

- Students of IBHM participated in Young leader's Entrepreneurial Society event in LUMS, Lahore.
- Sara Noshad was selected for the Global UGRAD Exchange Program in 2019. She went to Coastal Carolina University, South Carolina, USA.



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CHAPTER 12

Finance

12.1 Financial Year at Glance (2019-2020)

DUHS approved the Strategic Plan (2019-2030), under which we have built, rehabilitated, remodeled and expanded physical and technological infrastructure that had outlived its utility. The new facilities, expanded rapidly, can now easily last for the next ten years. However, the maintenance of these facilities is a big challenge and still posing an uphill task for the management to control.

DUHS ended the last fiscal year 2019-20 with an overall revised deficit of Rs. 401.523 million.

Moreover, we believe that the important parameters for attaining prime objective of sustainability are good governance and a strong financial management system.

As per direction of the office of the President of Pakistan and the Higher Education Commission of Pakistan, we have already implemented the strengthening of financial management systems with complete ERP solution Microsoft Dynamics 365, capable of providing accurate and timely financial information necessary for taking informed decision making, that will eliminate administrative efforts and increase efficiency, internal control and sustainability.

12.2 APPROVED BUDGET

Rs. in Million

Particular		Approved Budget 2019-20	Revised 2019-20
12.1	Annual Statement of Accounts	Annual Statement of Accounts for F.Y. 2019-20 is in progress.	
12.2	Recurring Budget	3,453.191 (m)	3,860.488 (M) (Annex: I)
12.3	Self-Generated Income	2,093.265 (m)	2,505.370 (Annex: II)
12.4	ERP related activities	Implemented (Financials, Procurement, Inventory Management, HRMS, HMFS)	
12.5	Trend per Student Spending	Revised Exp. 3,860.488 million / 8006 Students =	2019-20
			0.48 million per student (Rs. 482,199)
12.6	Development Budget HEC	HEC Rs. 00. 00	
		GOS Rs. 647.657 (m)	
		UDWP Rs. 00 (m)	

Financial Year at Glance (2019-2020)

A- RECEIPTS:

As per Revised, total receipts for the FY 2019-20 increased by 12.74% as compare to Budget Estimates 2019-20, mainly due to the following factors:

Particulars	BUDGET 2019-20	REVISED 2019-20	Increase/ (Decrease)
HEC	577.98	611.87	33.89
Grant for TTS	7.495	5.072	(2.42)
Provincial Govt. Grant	150.000	336.653	186.65
Donations	7.000		(7.00)
Any Other Grant	232.371		(232.371)
Self-generated income	2,093.27	2,505.37	412.11
Total	3,068.11	3,458.97	390.85

B - EXPENDITURE

The Revised Expenditure for 2019-20 has seen an increase of 11.79% as compared to Budgeted Estimates 2019-20. A summarized comparison of different expenditure heads is as follows:

Rs. in Million

Description	BUDGET	REVISED	Difference
	2019-20	2019-20	
Pay & Allowances	2,226.973	2,306.789	79.82
Utility	88.500	165.890	77.39
Occupancy Cost	63.000	52.020	(10.98)
Travel & Transport	96.000	90.440	(5.56)
Operating Expenses	443.332	750.122	306.79
Employees Retirement Benefits	146.875	165.000	18.13
Repair & Maintenance	75.700	91.820	16.12
Research & Feasibility Studies	42.200	42.000	(0.20)
Financial Assistance / Scholarship	145.562	33.000	(112.56)
Entertainments & Gifts	5.500	4.645	(0.85)
Physical Assets	68.900	87.385	18.49
Civil Work	11.000	5.890	(5.11)
Others	39.650	65.487	25.84
Total	3,453.192	3,860.488	407.296

12.3 Recurring Budget (2019-2020)

Rs. in Million

Code No.	Budget Heads	2019-20 (Budget)	2019-20 (Revised)
A012	Pay & Allowances	2,226.97 3	2,306.789
A031	Fees	4.100	6.600
A03101	Bank Fees	1.900	0.600
A03102	Legal Fees	2.200	6.000
A032	Communication	25.050	52.933
A03201	Postage and Telegraph	0.050	0.600
A03202	Telephone & Trunk Calls	3.500	2.900
A0320402	PERN	17.000	28.800
A0320403	Internet Charges	3.000	19.720
A03205	Courier and Pilot Services	1.500	0.913
A033	Utilities	88.500	165.890
A03301	Gas	4.250	83.020
A03302	Water	9.250	3.700
A03303	Electricity	75.000	79.170
A034	Occupancy Costs	63.000	52.020
A03407	Rates and Taxes	0.750	0.020
A03410	Security Charges	27.250	30.000
A03470	Other Occupancy Cost	35.000	22.000
A036	Motor Vehicles	5.500	5.954
A03602	Insurance	3.000	3.077
A03603	Registration	2.500	2.877
A037	Consultancy & Contractual Work	5.000	-
A03702	Management	5.000	-
A038	Travel & Transportation	96.000	90.440
A03801	Training - Domestic	4.500	2.500

A03802	Training - International	10.000	6.700
A03805	Travelling Allowance - TA/DA	6.000	4.740
A03806	Transportation of Goods	1.000	0.500
A03807	P.O.L. Charges	15.750	16.000
A03808	Conveyance Charges - for late sitting	0.750	-
A03810	Study Tours	1.000	-
A03820	Others	57.000	60.000
A039	General Operating Expenses	443.332	750.121
A03901	Stationery	4.500	5.664
A03902	Printing and publications	15.000	12.100
A03903	Conferences / Seminars / Workshops / Symposia	5.500	2.000
A0397006	Convocation Expenses	10.000	13.000
A03905	Newspapers Periodicals and Books	11.000	12.494
A03906	Uniforms and Protective Clothing	-	0.003
A03907	Advertising & Publicity	15.015	14.200
A03912	Expenditure on Pakistani Delegations to Foreign Countries	1.000	-
A03915	Payment to Govt. Department for Services Rendered	0.500	0.300
A03917	Law Charges	4.500	-
A03918	Exhibitions Fairs & Other National Celebrations	1.650	0.204
A03919	Payments to Other services rendered - Audit Fee etc.	2.250	4.889
A03936	Foreign / Inland Training Course Fee	2.750	-
A03940	Unforeseen Expenditure / Contingencies	3.300	-
A0394204	Specific Consumable	12.500	50.000
A03959	Stipends Incentives etc.	275.000	589.000
A03970	Others	16.000	-

A0397002	i. Operational Cost-Office of Research Innovation & Commercialization (ORIC)	26.000	11.700
A0397003	ii. Operational Cost of Quality Enhancement Cell (QEC)	4.217	1.000
A0397005	iv. Conduct of Examinations	15.000	16.000
A0397006	v. Sports Activities	1.900	0.368
A0397008	vii. Remuneration to Part-time Teachers / Visiting Faculty	15.750	17.200
A03	Total Operating Expenses	730.482	1,123.959
A04	Employees Retirement Benefits	146.875	165.000
A04102	Commuted Value of Pension	117.875	130.000
A04114	Superannuation Encashment of LPR	23.000	25.000
A04170	Others - Assistance Package for Families of Employees	6.000	10.000
A13	Repair and Maintenance	75.700	91.820
A13001	Transport	7.500	17.465
A13101	Machinery & Equipment	18.000	17.100
A13201	Furniture & Fixture	3.250	8.593
A13301	Office Buildings	20.000	18.000
A13302	Residential Buildings	15.000	13.000
A13703	I.T. Equipment	4.250	3.045
A13801	Maintenance of Gardens	3.300	10.337
A13901	Lines & Wires - Repair	2.200	4.163
A13920	Others - Repair	2.200	0.117
A021	Feasibility Studies	2.200	2.000
A02101	Feasibility Studies	2.200	2.000
A022	Research Survey & Exploratory Operations	40.000	40.000
A02201	Research and Survey	40.000	40.000

A061	Financial Assistance/ Scholarships	145.562	33.000
A06101	Merit Scholarships	7.155	-
A0610102	Need Based Scholarships	137.907	-
A06102	Other Scholarships		
	HEC Ehsaas Scholarship		32.000
	Loan to Students		1.000
A06103	Cash Awards - for Meritorious Services	0.500	-
A063	Entertainments and Gifts	5.500	4.645
A06301	Entertainments	5.500	4.645
A09	Expenditure on Acquiring of Physical Assets	68.900	87.384
A09201	Hardware	15.000	22.000
A09202	Software	5.500	5.500
A09203	Purchase of I.T. Equipment	13.200	10.661
A09501	Purchase of Transport	-	3.469
A09601	Purchase of Plant & Machinery	13.200	20.000
A09701	Purchase of Furniture & Fixture	10.000	15.755
A09470	Others	12.000	10.000
A124	Civil Works - Buildings & Structures	11.000	5.890
A12405	Electrification Plumbing and Other Infrastructure	11.000	5.890
	Total Expenses	3,453.19 1	3,860.487

12.4 Self-Generated Income (2019-2020)

Rs. in Million

Code No.	Budget Heads	2019-20 (Budget)	2019-20 (Revised)
C02813	Education General Fees [301 - 390]	1,867.976	2,315.147
C0281301	Admission Fees	62.696	40.010
C0281306	Tuition Fees - Regular Fee Structure	471.627	451.627
C0281311	Tuition Fees - Self-Support Scheme	86.900	90.000
C0281316	Tuition Fees - Self-Financing Scheme	1,161.643	1,720.910
C0281332	Examination Fees - University On Campus Students	19.350	10.500
C0281333	Examination Fees - Affiliated Colleges Students	1.800	
C0281346	Degree / Transcript Fee etc.	6.500	2.100
C0281361	Income from Continuing Professional Development Courses for Business & Community	3.060	
C0281380	Course Fees – ‘Post-Graduate Diploma’	6.116	
C0281382	Course Fees – ‘Special / Short Courses’	0.883	
C0281390	Other Misc. Fees from Students	47.401	
C02812	Hostel Fees / User Charges [201 - 226]	94.000	48.000
C0281206	Hostel Room Rent	47.000	24.000
C0281221	Income from Transport / Buses	47.000	24.000
C02810	Income from Endowments	12.290	23.000
C02815	Income from Regeneration & Development Programs [566 - 572]	18.000	
C0281572	Income From Regeneration & Development Programs - Others	18.000	
C02818	Others [809 - 870]	101.000	119.223
C0281830	Sale of Prospectus / Forms	22.000	
C0281840	Rent / Lease of University Buildings / Shops etc.	2.000	
C0281860	Interest on Investments / Cash Balances etc.	37.000	60.000
C0281870	Scholarship Income – HEC Ehsaas Program		32.000
C0281870	Other Misc. Receipts	40.000	27.223
	Total Own Income	2,093.265	2,505.370

12.5 Student Financial Aid:

Dow University of Health Sciences, Karachi, has established a University Advancement Cell and Financial Aid Office for the financial facilitation/assistance to the students. The University is engaged in the process of increasing the number of funding organization / philanthropist and sign MOU with them.

The University future planning is to enhance duration of refunding amount of scholarship and develop a new fee structure with emphasis on minimizing the burden of scholarship awardee, to increase promotional activities through workshops, seminars, social media etc. and to arrange Symposium of different funding agencies with students, so that they may explain their program to students directly.

S #	Institution/Organization Offerings Financial Aid/ Scholarships To DUHS Students	Type of Assistance
1	Ehsas Scholarship	Scholarship
2	HEC Need Based Scholarship	Scholarship
3	NEST Scholarship	Scholarship
4	British Counsilate (Scotland) Scholarship	Scholarship
5	Abdullah T. Wehwaria and Farhat Aleem Trust Scholarship	Scholarship
6	Balochistan & Fata Scholarship	Scholarship
7	Board of Intermediate Scholarship	Stipend
8	Dr. Abdul Aziz Khan Scholarship	Scholarship
9	HEC Scholarship for Afghan National Students	Scholarship
10	Ministry of Minority and Religious Affairs, Minority Scholarship	Stipend
11	Professional Education Foundation (PEF)	Scholarship/Interest Free Loan/Zakat
12	Scheduled Caste Students Tharparkar Scholarship	Stipend
13	Sindh Endowment Education Scholarship	Scholarship
14	The A&N Foundation	Scholarship
15	University of Karachi Alumni Association (UKAA)	Scholarship
16	GEAR Trust	Scholarship
17	Pakistan Bait ul Maal	Stipend/Zakat
18	Ihsan Trust	Interest Free Loan



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CHAPTER 13

**University
Governance**

13.1 Syndicate Meetings:

- 78th meeting of syndicate held on Saturday, the 13th July, 2019.
- 79th meeting of Syndicate held on Saturday, the 28th September, 2019.
- 80th meeting of Syndicate held on Saturday, the 30th November. 2019.
- 81st meeting of Syndicate held on Friday, the 14th March, 2020.

13.2 Academic Council Meetings:

- 17th meeting of Academic Council held on Wednesday, the 18th September, 2019.
- 18th meeting of Academic Council held on Wednesday, the 29th January, 2020.
- 19th meeting of Academic Council held on Thursday, the 30th April, 2020.

13.3 Board of Advanced Studies and Research Meetings:

- 58th meeting of the Board of Advanced Studies and Research held on 12th March, 2019.
- 59th meeting of the Board of Advanced Studies and Research held on 14th June, 2019.
- 60th meeting of the Board of Advanced Studies and Research held on 27th November, 2019.
- 61st meeting of the Board of Advanced Studies and Research held on 27th February, 2020.



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CHAPTER 14

**Resource
Generation &
Development**

The Vice Chancellor of Dow University of Health Sciences leads the functions of Resource Generation & Development. He is responsible to organize, administrate and manage projects for University Development and control the general activities of the University.

The main function of this office is to generate resources for University Development Programs and provide better services to all the stakeholders.

14.1 New Initiatives & Plans for Implementation

- Initiative to develop a central research center for Dental Colleges at Dow Medical College Campus, a hub for dental research in Karachi City.
- Implement a student clinical & psychological counseling service for the University.
- Extensive Ramadan Zakat Campaign was carried out to create awareness about services offered at the Dow University Hospital.
- Initiative to acquire Online Payment Gateway to facilitate donors from other countries to Donate and contribute in DUHS's projects.
- Multiple reunions with alumni community to create awareness and have pledges in future plans of the department.

14.2 Fututre Plans and Development

- Auditorium (for 700 students) - 24,200 Sqft
- Hostels for Female Student (for 200 students)- 45,562 Sqft.
- Extension of College of Pharmacy Building (2,700 Sqft) - Academic Block
- Establishment of an Alumni Database for future fundraising and resource generation activities.
- Institute for Genomics & Genetic Diseases Research & Treatment Center (45,000 Sqft) - Academic Block
- Raise Awareness & Funds for the establishment of Center for Genomics in a public sector University of Pakistan.
- Upgrade in ICT Infrastructure (immediate need of 530 systems) in various digital libraries across DUHS- DVTC, ION, SPH, DCOP, IPM&R & DIMC
- Establishment of Business Incubation Center Building/floor/area with minimum covered area of 10,000 sq. ft. for BIC activities, including successful development of start-ups and fledgling companies by providing entrepreneurs with an array of targeted resources and services, support linkages between academia and industry, and promote innovative research based initiatives to enhance the competitiveness of Pakistan's economy.

14.3 Resource Mobilization Activities 2019-2020

- Allied Bank Limited donated PKR 3 million in donation to DUHS.
- ASIA Petroleum has donated monetary grant of PKR 1 million to DUHS.
- Infinix Technologies has donated 40,000 face masks to DUHS estimating cost is PKR 0.2 Million.
- Ihsan Trust has also increased the number of students for their Qarz E Hasna Program to 120 from 92 students.
- Professional Education Fund (PEF) has increased the number of students to be given Qarz E Hasna from 12 to 50 students.
- Resource Mobilization initiated donor Martin Dow Limited has sponsored DUHS DICE Event with PKR 2.7 million as title partner.
- Dawlance Pakistan and Engro Foundation / Dawood Foundation has donated ppes, Face Shields, Covid Testing Booth and a ventilator.
- PSO give monetary grant of RS. 6.4 million to the DUHS. The basic aim of this support was to enable DUHS to be able to fight Covid-19. PSO has large annual CSR budget, and this is the first time DUHS have mustered a grant like this from a corporate partner.
- H&M Foundation has donated 5 ventilators Model ACM812 to DUHS along with 60 3M face mask Model 6100 with filters for DUHS. The estimated cost of the donation confirmed by the donor is around PKR 4 million.
- Resource Mobilization previous year's initiative to acquire Internet Payment Gateway for online payments of Zakat and Donation during the Holy Month of Ramzan mustered PKR 4 million this year in Zakat and PKR .5 million in Donations.
- SAAYA – a student run NGO upon approaching has donated a ventilator costing around PKR 1.5 Million and have committed to donate bronchoscopy machine to DUHS estimated at PKR 1 Million. Along with these the NGO has donated ppes and took responsibility of renovation for the Covid19 Emergency Unit (container) placed outside DUH- ER.



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CHAPTER 15

**Health Center &
Medical Facilities**

15.1 Medical Facilities of Dow University of Health Sciences

Dow University Health System a unit of Dow University of Health Sciences is the largest and the most comprehensive provider of tertiary clinical care in the region. Anchored by Dow University Hospital, the System is comprised of Dow Institute of Radiology, Dow Diagnostic Research & Reference Laboratory, OJHA Institute of Chest Diseases, Dr. Abdul Qadeer Khan Institute of Behavioral Sciences, Institute of Physical Medicine & Rehabilitation, National Institute of Diabetes & Endocrinology, National Institute of Liver & GI Diseases, and Dr. Ishrat-ul-Ebad Khan Institute of Blood Diseases.

Dow University Hospital (DUH) was established in 2009 as a tertiary care teaching and training facility for students, residents and fellows in medicine, pharmacy, nursing, dental, and other allied health sciences. With a capacity of over 500 beds, DUH is the only modestly priced tertiary care hospital that serves the burgeoning healthcare needs of the community. It provides education and training to both undergraduate and postgraduate students in the following colleges/schools/institutes in DUHS:

• Institute of Nursing
• Dow College of Pharmacy
• Dow College of Biotechnology
• Dow International Dental College
• Dow International Medical College
• Dow Institute of Medical Technology
• Institute of Business & Health Management
• Dr. Ishrat-ul-Ebad Khan Institute of Oral Health Sciences

It is among the few hospitals in the region that provide services for liver, kidney and bone marrow transplantation. Additionally, it offers complex and advanced medical and surgical care needed for patients in the areas of cardiology, cardiac surgery, neurology, neurosurgery, gynecology & obstetrics, emergency medicine, pediatrics, nephrology, physical medicine & rehabilitation, dermatology and other disciplines.

Some of the accomplishment in FY 2019-2020:

1. Established Drug & Poison Information Centre
2. Successfully conducted over 100 living-related renal transplants
3. Initiated a year-long Pharmacist Internship Program – a first such program in a public sector hospital.
4. Established Nursing Education Services (NES) to provide longitudinal education and training of nursing staff.

5. Initiated the process of developing an annual budget with Profit & Loss statements at the level of each service line.
6. Inauguration of purpose-build Clinical Hematology & Bone Marrow Transplant (BMT) facility
 - First successful Bone Marrow Transplant conducted in a 63 years old patient with Multiple Myeloma
7. Established Pharmacy & Therapeutic Committee
 - To develop Hospital Formulary in compliance of National Essential Medication List 2018
8. Initiated the deployment of Hospital Information Management System for:
 - Both inpatient and outpatient Computerized Physician Order Entry (CPOE)
9. Leadership at DUH
 - Prof. Haris Alvi, Medical Superintendent, DUH
 - Ms. Iffat Swamir, Chief Operating Officer, DUH
 - Mr. Abdul Hakim, Nursing Superintendent, DUH
 - Sohail Rao, MD, MA, DPhil., Chief Executive Officer, DUH
 - Ms. Aasma Hamid, Manager, Department of Pharmacy, DUH
 - Initiated clinical rounds by pharmacists in BMT and Intensive Care Units.

Service area within Dow University- OJHA campus are:

• Renal Transplant Unit
• Dow University Hospital (DUH)
• Dow Institute of Radiology (DIR)
• Center For Surgical Oncology
• Dr. Abdul Qadeer Khan Institute Of Behavioral Sciences
• National Institute Of Diabetes And Endocrinology (NIDE)
• Dow Diagnostic Research & Reference Laboratory (DDRRL)
• National Institute Of Liver And Gastrointestinal Diseases With Liver Transplant Unit (NILGID)
• Dental Sections, DIMC & DDC (With 10 Units For Oral & Maxillo-Facial Surgical Procedures) & Dental OPD Of DIKIOHS

Pharmacy Services

Pharmacy provides 6 days a week services to its customer. All prescription drugs and over the counter drugs are provided by the IPD & OPD pharmacy to cater to the needs of our patients as well as walk-in patients.

Vaccination Services

Vaccination services are available as provided by the National Expanded Programme of Immunization (EPI) and free of cost at OICD.

Physical Therapy Services

The Department of Physiotherapy provides comprehensive inpatient and outpatient services. All Physiotherapists are here to assess and treat patients of all ages and ailments and provide an important support service for our inpatients and out patients in need of dire physical therapists.

In-patient Departments

Surgical	Medical	Paeds
E.N.T	Dialysis	Psychiatry
Orthopedic	Gynae / Obs	Ultrasound/ VIR

Critical care Units

EEG	CTG	VEP	EMG / NCV
G.A Fitness	Labor Room	Surgical ICU (06 Bed)	Dialysis lab (Newly built)
Medical ICU (11 Bedded)	Neonatal ICU (06 Incubators)	Operation Theater (04 O.T Tables)	Emergency Department (15 monitored Bed)
Pulmonary Function Test	Sleep Lab (Polysomnography)	Fully equipped 24 hours running ER including separate minor O.T, Ultrasound & X Ray.	

In summary, Dow Hospital provides following services and facilities to their patients:

<ul style="list-style-type: none"> Intensive Care Unit (ICU)
<ul style="list-style-type: none"> Dialysis Department
<ul style="list-style-type: none"> Living donor Liver transplant
<ul style="list-style-type: none"> High Dependency Unit (HDU)
<ul style="list-style-type: none"> Out Patient Department (OPD Block)
<ul style="list-style-type: none"> Neonatal Intensive Care Unit (NICU)
<ul style="list-style-type: none"> Hepato-pancreatic biliary surgeries
<ul style="list-style-type: none"> 24 hours Emergency Service Department

- 24 hours Emergency Service Department
- Vascular Interventional Radiology (VIR), highly specialized procedure for various diseases minimizing major surgeries
- All types of medical & surgical treatments to cardiac patients
- Operation Theatre (OT) Complex for all major & minor surgeries

Dow Diagnostic Research and Reference Laboratory (DDRRL)

Dow Diagnostic Research and Reference Laboratory (DDRRL) was established in October 2007 to provide reliable, high quality diagnostic services of International standards for routine and specialized tests at economical rates (i.e. approximately at 30% as compared to private rates), for all socioeconomic segments of the population. The laboratory is the fastest growing lab in Pakistan, whose internal quality assurance is guaranteed by daily controls. DDRRL also has the provision of online electronic reporting and Image transfer facilities for all patients.

Radiological Testing Services

The Dow Institute of Radiology and Dow Diagnostic Complex are facilitated with services that include the provision of all modern diagnostic facilities like:

X-rays	Ultrasound	Fluoroscopy
Mammography	Echocardiography	General Radiography
Computed Tomography (CT) Scan	Magnetic Resonance Imaging (MRI)	Dual Energy X-Ray Absorptiometry (DEXA) Scan

Operation Theatre (OT) Complex

Dow University Hospital established a huge operation purpose built theater i.e. OT Complex of International standards having 80,000 sq. ft. area which is fully equipped with most modern equipment. The OT Complex has nine 09 operation theatres. Two are designated for Liver Transplant and hepato pancreatic biliary surgeries while two theatres are designated for Cardiac and Orthopedic Surgeries; the required special instruments and gadgets for the purpose are installed and provided.

The remaining five Theatres are also fully equipped with most modern equipment to have operations of General Surgery, Urology, ENT, Plastic Surgery, Neuro Surgery and Thoracic Surgery, Bariatric Surgery etc. This complex also has fully equipped recovery room. The operation floor has a unique channelizing operating in automation to collect the dirty liner with safety, which is then washed, sterilized and stored hygienically preventing infection.

The OT complex has state of art equipment including ventilators, invasive hemodynamic monitoring system and hemodialysis. Since various specialties also provide Postgraduate

training, camera recording and CCTV system is also installed for telecasting live operative procedures. This new OT complex has lot of facilities for the doctors, staff and students, including rest rooms, canteens and separate lockers besides other facilities.

Physiotherapy Services Department

Dow University of Health Sciences also offers physiotherapy services to outpatients through the attached department of the School of Physical Therapy at Institute of Physical Medicine & Rehabilitation (IPM&R). This department provides comprehensive rehabilitation services, i.e. cardiac, neurological musculoskeletal and pediatric rehabilitation, currently providing physiotherapy services to more than 55 patients per day. Since its establishment 14000 patients have been provided with physiotherapy services.

(Prostheses) Artificial Limbs and Braces/Supports (Orthoses)

Department of Prosthetics & orthotics at IPM&R, DUHS is providing (Prostheses) artificial limbs and braces/supports (orthoses) to person with disabilities. Around 975 appliances are delivered free of cost.

Dow Artificial Limb Centre

The Department of Prosthetics & Orthotics is serving the community by providing high quality prosthetics & orthotics appliances. During the year 2014, approx. 1580 patients benefited from the services of this department. Other than serving patients arriving at the center, this center is also facilitating other medical institutions for artificial limbs and appliances. Some of these services include facilitation offered to Jinnah Post Graduate Medical Centre for the Department of Orthopedics Club Foot Clinic by providing 300 Dennis brown splints for their congenital talipesequi-varus patients and providing Deniss Brown Splints for CTEV Patient (Clubfoot clinic).

Blood Transfusion Services Program

Safe blood is a crucial and irreplaceable component in the medical management of many diseases. In Karachi, because of the massive influx of patients from interior Sindh and other rural countryside, the demand of safe blood for transfusion could not be met with only replacement donors. Blood shortage in Pakistan is documented to be about 40% and this problem is further accelerated by inappropriate use of blood and its products.

Dow University of Health Sciences has taken the initiative towards provision of safe blood products to the needy patients. The overall project objective is to contribute to lowering hemorrhage mortality and to reduce the risk of transfusion transmitted infectious diseases and provision of safe and efficacious blood and blood products. The Voluntary non-remunerated blood donation (VNRBD) is the ideal source of quality blood, which forms less than 15 % of the demand of the blood in Pakistan. Under this initiative, Safe Blood Transfusion Services have been initiated with the strong pillars of voluntary blood donation with considerable community outreach, training of human resource in blood

banking and transfusion medicine as per the recent scientific techniques and under the WHO recommended Quality Management principles, developing service delivery in blood banking and transfusion laboratory sciences with continuous education and research in transfusion medicine.

DUHS blood donation services are extremely active under Donor Management Department of the Centre and disseminating the message of Voluntary Blood Donation to the population at large. The purpose is:

- | |
|--|
| <ul style="list-style-type: none">• Creation of a culture of voluntary blood donation through communication and education. |
| <ul style="list-style-type: none">• Build a stable blood donor pool by motivating and recruiting new donors from low-risk populations, and encouraging existing or lapsed donors to become regular donors and to recognize the contribution to society made by blood donors. |
| <ul style="list-style-type: none">• Provide quality donor care, so that blood donation is not onerous |
| <ul style="list-style-type: none">• Provide quality assured blood products to all the needy patients |
| <ul style="list-style-type: none">• And create a sustainable foundation of advanced WHO recommended blood banking in Pakistan. |

OJHA Institute of Chest Diseases (OICD) & Chest Disease Clinics

OICD was established in the early forties, as a TB sanatorium and now recognized as a center of excellence for Tuberculosis by the World Health Organization (WHO). The services provided here are free of cost and normally such type of ICU services costs around Rs. 20,000 - Rs. 50,000 / day in private hospitals.

The facilities provided to patients include high quality diet, recreation environment with TV, cable etc. and vocational training and support in the form of training for candle making and stitching etc. The Dow University takes the responsibility to sell their products for them.

Four out-patient clinics of OICD in the periphery of the city are also functioning, these are chest clinics of Iqbal Yad, Nazimabad, Lyari and Malir, Each clinic has a well-organized DOT (Directly Observed Treatment), where these patients with TB are provided medicines and health education.

Daily about 600 patients visit these TB clinics for DOTS treatment and follow up.

TB HOSPITAL of 250 beds provides all possible facilities to indoor and outdoor patients for diagnosis and treatment of tuberculosis.

MULTI DRUG RESISTANT (MDR) TB is a great problem. In Pakistan about 15,000-20,000 tuberculosis patients presently suffering from Multi-Drug Resistant (MDR TB), each patient requires approx 500,000 Rs. for management including costly medicines and other logistics but at OICD their treatment is free.

15.2 Counseling for Stress Reduction

For Students:

Dow University of Health Sciences, Karachi, has taken the initiative to council the University students for their stress reduction by facilitating or providing financial assistance through various Institutions/Organizations. There are various organizations which are not in connection with the University, in such organizations University still facilitates students as a forwarding authority like others. Currently University signed MOU with various philanthropists, to facilitate students as well as channelize system. Meanwhile, University forwarded applications to the following Institutions with respective assistance/facility.

15.3 Health Insurance for DUHS Employees

Financial responsibilities are considered as the main source of stress. To reduce the financial burden of its employees; DUHS provides medical insurance coverage to its all employees appointed on Regular basis and to /Contractual basis with at least one year service.

The insurance coverage is currently provided by Asia Care Health & Life Insurance Co. Ltd. The details of this health insurance scheme are discussed here as under:

The Employees & their dependents covered are divided in the following categories:

Benefit Structure for Employees and Staff of DUHS

Benefits/ Coverage	Categories and Annual Entitlements in Rs.			
	Plan - A B - 21 & 22	Plan - B B-19 & 20	Plan - C B-16 to 18	Plan - D B-1 to 15
Hospitalization Coverage per Insured per Annum	715,000	550,000	375,000	275,000
Daily Room / Bed limit per Insured	Deluxe Room	Private Room	Semi Private Room	General Ward / Room
Maternity Limits for Normal Delivery / Forceps	50,000	30,000	25,000	20,000
Maternity Limits for C-Section / Multiple Births	80,000	50,000	40,000	30,000

Out-Patient Reimbursement per Family per Annum	50,000	30,000	20,000	15,000
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Benefits of Employees Covered under IPD/ Hospitalization

1.	Burns
2.	Stroke/CVA
3.	Surgical fee
4.	Thyroid Dichotomy
5.	Psychiatric Treatments
6.	Congenital Birth Defects.
7.	Diagnostic Investigations
8.	Local Ambulance Charges.
9.	Congenital Birth Defects.
10.	Organ Transplant Implants
11.	Operation Theatre Charges
12.	Blood and Oxygen supplies
13.	Daily Room & Board Charges.
14.	CU/CCU/SCU/HDU charges
15.	Angioplasty/By-Pass Surgery
16.	Maternity related complications.
17.	In-Hospital Consultation Charges
18.	Declared/Undeclared pre-existing conditions
19.	Emergency Room treatment for Accidental and Non-Accidental emergencies.
20.	Enhancement of Hospitalization limit in case of Accidental injuries (50% of available limit)
21.	Pre-Post Hospitalization covered including OPD, Diagnostic Tests, Consultation Charges & prescribed Medicines within 30 days prior to or after Hospitalization.
22.	Miscellaneous Hospital Services and Supplies (Drugs, Dressings, Prescribed Medicines, Laboratory Examinations, Physiotherapy, intravenous injections & solutions, administration of blood and blood plasma including cost and any other fluids administered during surgery.)
23.	Other Operative procedures

Benefits of Employees Covered Under Maternity

1.	Anesthesia Charges.
2.	Pre & Post Natal Expenses.
3.	Coverage of Congenital Birth Defects.
4.	Circumcision Charges of Newborn Baby Boys.
5.	Midwife Charges if delivery takes place at home.
6.	Operation Theatre/Physician's/Surgeon's charges.
7.	Normal/Caesarea/Multiple Births/Force Delivery.
8.	Follow-up visits of patients during or after pregnancy.
9.	Prescribed Medical Supplies & Services during Hospitalization.
10.	Declare/Undeclared Pre-Existing Conditions will be full covered.
11.	New Born Babies Nursery Care Charges including incubator facility.
12.	Obstetricians Fee for Delivery & Consultation during Hospitalization.
13.	New Born Babies are to be covered from very 1 st day of Birth with Separate IP limit.

Benefits Covered Under OPD

1.	Vaccinations.
2.	Prescribed Medicine
3.	Homeopathic Treatment.
4.	Prescribed Diagnostics Tests
5.	Accident Related Dental Treatment.
6.	Declared / Undeclared Pre-Existing Conditions.
7.	Physician / Consultant's fees for consultations.
8.	Pathology, Radiology and Diagnostic Tests, X-rays & Ultrasounds.
9.	Coverage / Treatment from any Hospital / Clinic of the Patient's Choice.
10.	Costs for Treatment by Therapists and Complementary Medicine Practitioners.
11.	Wellness Mammogram, Pap smear, Prostate Cancer Screening or Colon Cancer Screening.
12.	Dental Treatment including Extractions Teeth, Root Canalizing or Capping or Similar Treatment.

Day Care Facilities

MRI	CT Scan	Lithotripsy
Angiography	Gastroscopy	Herniorrhaphy
Appendectomy	Cataract Surgery	Thallium Scan
Cholecystectomy	Excision Biopsy	Kidney Dialysis
Partial Mastectomy	Veins/Varicose	Tonsillectomy/Adenoidectomy
Non-Malignant Tumors/Abscess		
Endoscopy/Cystoscopy/Colonoscopy		
Treatment of Cancer (including chemotherapy & Hormonal therapy with pre and post cover)		
Treatment of Hepatitis A B & C such as Inj. Interferon Therapy/Tab. Sovaldi or equivalent along with all combination therapy, consultation & Lab Tests such as PCR/LFT up to Hospitalization Limits.		
Treatment of all injuries/fractures & lacerated wounds (out-patient within 24 hours). Accidental Dental Treatment (Out-Patient within 48 Hours for Pain relief only).		
Other day care procedures that need on emergency basis.		
Other Operative Procedures.		



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CHAPTER 16

**University
Sustainability
Report**

16.1 Good Health & Well Being - SDG 03

Global and National Collaborations

The Dow University of Health Sciences collaborated with different organizations / bodies at local, national and international levels to improve health and wellbeing.

At Global level, DUHS has acquired United Nation Academic Impact (UNAI) Membership Citation in

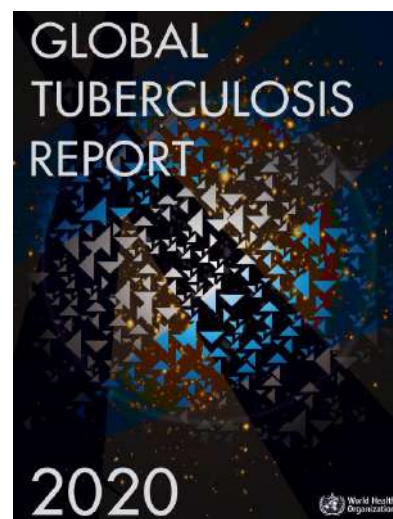


April 2020, as a

member and values its commitment to its ten principles which includes; Commitment to the United Nations Charter, Human Rights, Educational opportunity for all, Sustainability, Capacity-building in higher education systems, Global citizenship, Peace and conflict resolution, Addressing poverty, Higher Education opportunity for every interested individual and the “unlearning” of intolerance.

Furthermore, Ojha Institute of Chest Diseases (OICD), a constituent institute of DUHS gathered and submitted the Tuberculosis data from Pakistan for National TB prevalence surveys of Global Tuberculosis to promote good health & wellbeing.

At national Level, OICD – DUHS supported as a Programmatic Management of Drug Resistant Tuberculosis (PMDT) site, in collaboration with National TB Program for onsite capacity building with inclusion of OICD, DUHS in the List of PMDT sites of ‘Annual TB Report Pakistan 2019.



Also, Dow College of Pharmacy – DCOP, a constituent college of DUHS, collaborated with OBS Pakistan Private Ltd. for the betterment of academia and Pakistan Pharmaceutical Industries. The purpose of this MOU was to establish the terms and conditions under which two parties would meet and function for the betterment of academia and Pakistan Pharmaceutical industry and mutual academic industrial collaboration system which ultimately contributes to the health and wellbeing of the society.

Moreover, DUHS participated in meetings on TB free Sindh Initiative in collaboration with Stop TB Pakistan and Ministry of Health & Population Welfare held on August 22, 2019.

Stop TB Pakistan

Locally OICD participated in various Inter & Intra District Quarterly Meetings on TB DOTS, surveillance and DLS in collaboration with Provincial Control Program for 2nd, 3rd and 4th quarter of 2019 - 2020. Additionally, OICD – DUHS participated in Provincial Committee meeting on Non-Communicable Diseases held on 2nd February, 2020, for the control of NCD (Hypertension & Diabetes) and their risk factors and determinants. Also, OICD was involved in sharing data of Multidrug Resistant Tuberculosis (MDRT) patients in collaboration of PTB & NTB, to ensure social support & treatment of patients.

Community Outreach Programs

✚ School of Dental Care Professionals

DUHS has conducted various outreach programs throughout the year. The Department of Community Dentistry of Dr. Ishrat-ul-Ebad Khan Institute of Oral Health Sciences in administrative collaboration with the School of Dental Care Professionals (SDCP) conducted a health outreach program under the umbrella of DIABPER (Diabetes-Periodontitis) Body-Mouth Connection



Program through “DIAB-PER Trial Project” on 18-August-2019. Through this program the District Health Dispensary, located at PECHS Karachi was approached and its patients’ oral health examinations were carried out.

Additionally, primary dental services were provided such as dental scaling and oral hygiene instructions by dental hygienists and students of School of Dental Care Professionals. Portable dental units were used to deliver dental services. Patients’ blood samples were collected and

transported to Dow Lab with an aim to provide free glycemetic testing services. Patients who required invasive dental procedures were referred to dental institute at Ojha Campus and provided free dental treatment and follow-ups.

Moreover, on 2nd December, 2019, SDCP conducted Dental Care Outreach Program through Civic Engagement Program. The team visited the Luari Shareef Goth, a remote area, where access to dental care for the local community is not available, to provide primary oral health care services. The Department of Community Dentistry provided the logistic support and in addition, arranged the free oral hygiene samples for the local dwellers as an incentive to continue their oral hygiene practices. After dental examination, some preventive and primary dental care procedures such as ART, Fluoride gel application and mobile teeth extractions using anesthetic infiltration were performed by the faculty with the local community assistance.



Also, the School of Dental Care Professionals, DUHS celebrated World Oral Health Day 2020 to raise public awareness for oral hygiene among under-privileged communities. The Department of Community & Preventive Dentistry of Dow University of Health Sciences celebrates this day every year by raising public awareness among for oral hygiene maintenance, health walks and delivery of free dental services in under-privileged communities and under-served groups of society such as differentially abled groups, elderly homes dwellers etc. Due to COVID -19, 6-minutes video link was shared on March 20, 2020 on Facebook, to spread awareness regarding oral hygiene for the people who could not access dental practices.

Department of Community Medicine, Dow Medical College

The Department of Community Medicine, DMC organized various outreach sessions/ TV programs for the community i.e. Typhoid Conjugate Vaccination, Pneumonia & Immunization in COVID-19 and breast-feeding promotions etc. Below is the event calendar hosted by community medicine department beyond campus during 2019-20.

S. No	Event/ Course	Date	Venue	Facilitator/s
1.	TV Program immunization & pneumonia	October 17, 2019	Sindh TV	Dr. Khalid Shafi
2.	TV Program Covid-19	June 21, 2020	G TV	Dr. Khalid Shafi
3.	TV Program COVID-19 Child Health	May 11, 2020	Dawn News	Dr. Khalid Shafi
4.	TV Program Pneumonia & Immunization in COVID-19	May 7, 2020	GEO News	Dr. Khalid Shafi
5.	GOVT of Sindh Social Media Massage on Typhoid Vaccine	November 18, 2019	Online	Dr. Khalid Shafi
6.	TV Program TCV	November 10, 2019	Geo News	Dr. Khalid Shafi
7.	TV Program,TCV	November 20, 2019	Geo News	Dr. Khalid Shafi
8.	Awareness Program TCV	November 21, 2019	Ary News	Dr. Khalid Shafi
9.	Awareness Program COVID-19 Pregnancy and Child Health	May 11, 2020	DAWN News	Dr. Khalid Shafi
10.	TV Program Child Vaccination in COVIC-19	May 7, 2020	ARY News	Dr. Khalid Shafi
11.	TV Program Polio Education in Pakistan	April 12, 2020	Samma TV	Dr. Khalid Shafi
12.	Typhoid Conjugate Vaccine Advocacy Session	October 31, 2019	EPI Provincial Headquarter Karachi	Dr. Khalid Shafi
13.	Typhoid Conjugate Vaccine Advocacy Session	November 4, 2019	Grand TCV Seminar at Karachi University	Dr. Khalid Shafi
14.	Typhoid Conjugate Vaccine Advocacy Session	November 14, 2019	Madarsa Dispensary at Jamia Bannori	Dr. Khalid Shafi
15.	Typhoid Conjugate Vaccine Advocacy Session	November 15, 2019	Madarsa Dispensary at Jamia Bannori	Dr. Khalid Shafi
16.	Breastfeeding promotion	March 2,3- 2020	JPMC	Dr. Khalid Shafi
17.	Breastfeeding promotion	March 9,10- 2020	Sindh Govt Hospital Korangi 5	Dr. Khalid Shafi
18.	Breastfeeding promotion	March 12,13 – 2020	Patel Hospital Karachi	Dr. Khalid Shafi
19.	Awareness program Breastfeeding promotion	March 12,13 – 2020	NICH	Dr. Khalid Shafi



TV PROGRAM-IMMUNIZATION & PNEUMONIA
OCTOBER 17, 2019



TV PROGRAM COVID-19 JUNE 21, 2020



TV PROGRAM COVID-19 CHILD HEALTH MAY 11, 2020



GOVT OF SINDH SOCIAL MEDIA MESSAGE ON TYPHOID
VACCINE NOVEMBER 18, 2019



AWARENESS PROGRAM COVID-19 PREGNANCY
AND CHILD HEALTH MAY 11, 2020



TYPHOID CONJUGATE VACCINE ADVOCACY SESSION
OCTOBER 31, 2019

✚ Department of Community Dentistry, Dow International Dental College

Department of Community Dentistry, Dow International Dental College – DUHS participated in community outreach activity at Orangi Town School in collaboration with AKKM Foundation on 6th October, 2019. The faculty and students of DIDC delivered informative lectures regarding the preventions from oral diseases and the side effects of Tobacco use, as the main purpose of the visit was to create awareness among



the students. Furthermore, the college provided oral screening, guidance about the oral hygiene maintenance, demonstration on correct brushing methods and correct use of flows.

✚ Department of Community Dentistry, Dow Dental College

The Department of Community Dentistry of Dow Dental College visited various schools such as Government Boy Secondary School on 25th July, 2019 and Hoorbai Hajjani Girls High School on 19th September, 2019, in order to improve and promote oral health and nutrition outreach programs and projects. Moreover, flyers related to oral hygiene and nutrition were prepared by students, to raise awareness in local community.

DDC organizes community visit to govt. school

KARACHI - The Department of Community and Preventive Dentistry of the Dow Dental College, DUHS, conducted an oral health promotion program at the Government Boys Secondary School, Kotwal building.



HoD Dr Muhammad Taqi supervised the trip; lecturers including Dr Babar Zia and Dr Amber Saeed accompanied him. The purpose of this visit was to promote oral health awareness among schoolchildren. Students performed intraoral examinations on the schoolchildren and imparted information on brushing techniques instructing the children to maintain their basic oral hygiene. At the end of the session, a kit was distributed to the children containing toothpaste, a toothbrush, and a brushing chart to encourage them to improve their oral health. -PR

Extra Curricular

Oral health promotion program, DDC

KARACHI - The Department of Community and Preventive Dentistry and the Department of Oral Biology of the Dow Dental College recently conducted a combined oral health promotion program in collaboration with the Colgate Palmolive Company at Hoor Bai Hajjani Girl High School located at Ghazdarabad, Garden East. The trip was planned under the supervision of Dr Adnan Sukkurwala, Dr Muhammad Taqi, and Dr Syed Jaffar Abbas Zaidi. They were accompanied by students of third and first-year BDS, and trained lecturers, including Dr Babar Zia, Dr Amber Saeed, Sanam Faheem, and Rimsha Qasim.

The purpose of this visit was to promote oral health awareness among school children while bringing early clinical exposure to first-year dental students. The intraoral examination was performed by third-year dental students on 200-250 students while being assisted by first-year dental students. The data was recorded on WHO dental forms. The BDS students imparted information regarding brushing techniques using models and charts, instructing the children to maintain their basic oral hygiene. At the end of the session, kits, including toothpaste, toothbrushes, and brushing charts, by Colgate were distributed among children to

encourage them to improve their oral health. The administration of the schools appreciated the efforts of the dental team and ensured their full cooperation in continuing the program with the Dow Dental College in the future. Early clinical exposure of the first-year dental students with peer-assisted learning and mentoring

from third-year students is in line with PMDC's latest standard of curriculum aimed at bringing social accountability to dental colleges along with increased student motivation and confidence. The Dow Dental College has taken this unprecedented initiative in bringing dental curricular reforms to address societal needs. -PR



Flyers Prepared by Students Related to Oral Hygiene and Nutrition to Raise Awareness in Local Community

مذہ کی صحت پر حملے کے اثرات

- سوزوں کی سوجن
- ٹھنڈل ایروژن
- دانتوں کا پلٹنا
- دانتوں کا کھڑا

حمل اور منہ کی صحت

حمل کے دوران دانتوں کی دیکھ بھال محفوظ اور اہم ہے۔

مان کا صحت مند منہ، بچے کے لئے صحت مند آغاز!

حمل سے متعلق سوال / جواب

سوزوں سے خون کیوں نکلتا ہے؟
دانتوں کی صفائی نہ رکھنے کی وجہ سے سوزوں سے خون نکلتا ہے۔

دانتوں کی حفاظت صحت کو برقرار رکھتی ہے!

سوزوں سے بھاری بھاری حمل چلا جائے گا۔

اپنے منہ کو آہری طور پر سادھ پانی سے دھوئے۔ ٹیوٹھک پیٹ کی آزادی دانت کی سطح کو نقصان پہنچا سکتا ہے۔

گھبراہٹ سے بچیں۔ حمل کے دوران دانتوں کی دیکھ بھال سے بچنا اہم ہے۔

بہن سب سے دانتوں کی دیکھ بھال سے بچنا اہم ہے۔

بہن سب سے دانتوں کی دیکھ بھال سے بچنا اہم ہے۔

ZOBIA RAZZAK
01/2017/535-ODC

بدايات

دانت کو داغ لگانے والی مشروبات سے بچنا

نہایت سے گھاسی کریں

نہایت سے گھاسی کریں

نہایت سے گھاسی کریں

نہایت سے گھاسی کریں

نہایت سے گھاسی کریں

صحت مند غذا

دانتوں کی صحت پر غذا کے اثرات

دانتوں کی صحت پر غذا کے اثرات

دانتوں کی صحت پر غذا کے اثرات

دانتوں کی صحت پر غذا کے اثرات

دانتوں کی صحت پر غذا کے اثرات

OLD SMILES MATTER

Ensuring us for the best health of seniors benefits not only those who are seniors today, but also seniors in the future.

1 ORAL HEALTH CARE BENEFITS

- They're Fun Easy To RUSH
- Old age might become a reason of being happy.
- Old BAD HABITS (SUGAR, smoking, Drinking, Eating Pica, gels and Excess)
- Take good care of Dentures
- They, diabetes can cause infections

2 PROBLEMS AND THEIR POSSIBLE SOLUTIONS

Dental caries, tooth loss, dry mouth or oral cancer etc.

- Caring for oral care, visit dentist.
- Fluoride using for tooth, it will give BACTIC in sugar molecules.
- Stop eating too much hot food or cold or be changed.

3 ORAL HEALTH AND GENERAL HEALTH

- Oral health means general health
- Many problems such as diabetes, stroke, pain bleeding, gas odor changes, swelling on cancer cancer...
- They discuss oral health
- Disease and infection have direct effect causing dry mouth, thick tongue, white patches, bad breath.

4 YOU SHOULD CONTACT YOUR DENTIST IF YOU NOTICE:

- Tooth pain
- Red or swollen gums
- Dry mouth
- Mouth sores
- White or red patches in mouth
- Bad breath
- Loose teeth
- Poor fitting dentures

✚ School of Public Health

Balochistan Nutrition Project for Mothers and Children: Behavior Change Communication Pilot Project Plan (Jan 2019-Nov 2019)

School of Public Health, DUHS has been working as a national Advisor with FAO in Balouchistan on a pilot project of Integrated Homestead gardens (previously named Vegetables Kitchen Gardens) at a small scale. The project is under the umbrella of Balochistan Agri Business programme supported through the World Bank's Multi Donor Trust Fund to Nutrition.

The approach is designed to add value to the efforts of inter sectoral integration of AusABBA and BNPMC to achieve improved nutrition outcomes. This research project, using both qualitative and quantitative data collection methods, focused on women empowerment, eradicating mothers and children malnutrition further improving health, food security and community awareness and engagement in community kitchen gardening.



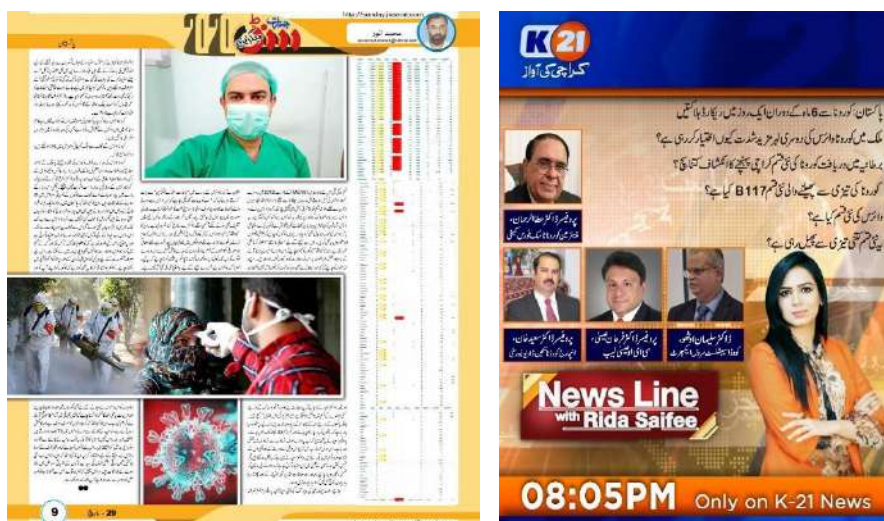
The program brought together government, donors, communities, and civil society for successful adoption of SDGs in Balouchistan.

✚ Professional Development Center

Professional Development Center – DUHS also conducted a CME session on Recent Clinical Advancement in Pediatric at Children Hospital Karachi on 13th December, 2019. This session is accredited by 2 credit hours from DUHS.

✚ Corona Virus Awareness Campaign

Dow University of Health Sciences ran multiple Corona Virus Campaigns in which awareness was provided to general public to prevent from Novel Corona by sustainable healthcare approaches. Also, awareness regarding the importance of Covid -19 vaccination and its availability at DUHS was disseminated through print media and electronic media.



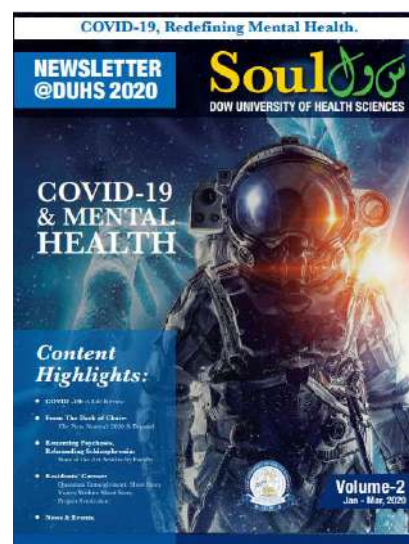
Services Available at DUHS

DUHS shares sports and fitness facilities with local community such as Cricket Ground and GYM facilities at Ojha Campus.



Dow University of Health Sciences provides mental health support to students and staff. The purpose of counseling services is to offer a professional and confidential setting for the psychological, emotional, and developmental support to students and employees as they pursue academic goals and explore personal growth. In case, a student requires more thorough evaluation for psychotropic medication, the student is referred to Dr. Abdul Qadeer Khan Institute of Behavioral Sciences (IBS), DUHS <https://www.duhs.edu.pk/new/ibs-introduction/>. Furthermore, IBS also conducted live awareness sessions on Facebook to provide counselling serves to general public.

The Department of Psychiatry, Dow Medical College provided information to students and public in the form of articles/materials for redefining mental health specifically during Covid 19 in the form of DUHS Newsletters Vol 2 & 3. Also, awareness sessions have been conducted to improve mental health.





Students-Are you dealing with any of the following?



DUHS has a provision for counselling services offered to our students.

Counselling may offer you:

- Confidential non-judgmental support for your learning needs.
- A safe place to learn to be you
- A response to your learning disabilities or learning issues.
- Help you to navigate change in your life.

Email for appointments:

Ms. Fouzia Rehman

Student Counsellor Office
located at Ground Floor, Nursing Building
Email: fouzia.rehman@duhs.edu.pk
Ext: 2608

Ms. Areeba Rehman

Student Counsellor
Dow International Medical College,
DIMA Campus,
Email: areeba.rehman@duhs.edu.pk

Counseling Services for Students

Students-Are you dealing with any of the following?



DUHS has a provision for counseling services offered to our students.

Counseling may offer you:

- ✓ Confidential non-judgmental support
- ✓ A safe place to learn to be you
- ✓ A response to your needs
- ✓ Boost your self-esteem & confidence
- ✓ Help you to navigate change
- ✓ Empower you to enjoy life

CONTACT Ms. Fouzia Rehman
Student Counsellor, DUHS
Email for appointment:
fouzia.rehman@duhs.edu.pk

Ground Floor, Nursing Building
Ext: 2608

"Give your stress wings and let it fly away."
- (Terri Guillemets)

Smoke Free Environment

Dow University of Health Sciences has the Policy for Tobacco & Smoke Free Environment at DUHS which was created in April 2020 and publicly available on DUHS website. Moreover, the department of Community Medicine, Dow Medical College – DUHS organized awareness session on July 10, 2019 for all the staff and students on 'Smoking and Tobacco Control & Cessation', to encourage a smoke free environment.



16.2. Quality Education – SDG 04

Access to Educational Resources

DUHS provides Continuing Medical Education, CME lectures on “Early Psychosis, Symptoms, Syndromes and Specialized Care” held on August 20, 2019, “HIV in Children”, held on August 27, 2019, “World Heart Day” held on September 26, 2019, “Breast Cancer Awareness” held on October 23 & 24, 2019, and “Typhoid Conjugate Vaccine” held on October 28, 2019, access with minimal charges to those that are internal members and also for general public. These are certified educational resources, as part of continuing medical education, which any health professional can participate in, after registration through the Professional Development Center, DUHS at Dow Medical College Campus and also at the Ojha campus, Karachi. Furthermore, PDC also organized interactive sessions on “Infant Parent Mental Health” held on October 24, 2019.

Online Training Course on Infection Prevention & Control
Course Duration: 3.5 hours

What will you learn...

- Overview of Infection Prevention & Control
- Universal Precautions for Infection Prevention & Control
- Cleaning & Disinfection of Patients' Environment
- ...and much more

Access the course now by following these 3 simple steps:

1. Create your account by visiting: www.duhs.edu.pk/ipo
2. You will receive an email with your log-in details and password
3. Log-in to the LMS with your email and password by visiting: www.duhs.edu.pk/ipo/login.php

Upon completion and successfully passing the Course you can apply and pay Rs. 500 online to avail your CME Certificate

Accredited 3.5 CME HOURS

For queries, email info@duhs.edu.pk

Public Events at DUHS

DUHS hosted various public lectures, walks and community educational events such as “World Chronic Obstructive Pulmonary Diseases (COPD) Day” organized by Ojha Institute of Chest Diseases – DUHS on 23 November 2019, public awareness sessions on “Breast Cancer and Skin Cancer” held on October 10, 2019, and training workshop on “Biosafety and Security in Health Care Institutions” held on January 09, 2020.

ANNOUNCEMENT

WORLD Contraception DAY 2019 SEPTEMBER 26

Venue: Arag Auditorium & Anatomy Lecture Hall
Dow University of Health Sciences (DUHS), Karachi

HIGHLIGHTS

- Creating Awareness about:
 - Expanding population & its implications
 - Contraceptive options available in Pakistan
- Meet the champions & Experts
- Exhibition
- Food Stalls
- Giveaways

Contraception is a Human Right!



DUHS provides information through awareness sessions such as Reproductive Health and Family Planning in collaboration with Green Star organization on 22nd February 2020 conducted by Dow Institute of Nursing & Midwifery and celebrating the World Contraceptive Day organized by Dow Medical College, DUHS on 26th September, 2019.



SEMINAR REPRODUCTIVE HEALTH AND FAMILY PLANNING IN COLLABORATION WITH GREEN STAR ORGANIZATION ON 22ND FEBRUARY 2020 AT ION&M, DUH

Furthermore, below the is the event calendar hosted by community medicine department at DUHS during 2019-20.

S. No	Event/ Course	Date	Venue	Facilitator/s
1.	Typhoid Conjugate Vaccine Advocacy Session	October 26, 2019	Dow Medical College Karachi	Dr. Khalid Shafi
2.	Typhoid Conjugate Vaccine Advocacy Session	October 28, 2019	Paeds Ward CHK DMC Karachi	Dr. Khalid Shafi
3.	Breastfeeding promotion	January 5,6 – 2020	DUHS Karachi	Dr. Khalid Shafi
4.	Breastfeeding promotion	January 7,8 – 2020	DUHS Karachi	Dr. Khalid Shafi
5.	Breastfeeding promotion	January 13,14 – 2020	DUHS Karachi	Dr. Khalid Shafi
6.	Zoom Session with students regarding Covid-19	June 6 2020	Online webinar	Dr. Khalid Shafi



Executive Training or Vocational Training Programs

DUHS provides a platform for health care professionals by signing agreement with Pakistan Institute of Quality. An executive education program which Certified Healthcare Quality Professionals and is open to all those not just from the University that provides lectures and interactive discussion sessions, each semester, open specifically to personnel working in health services or healthcare management.

Moreover, Dow University of Health Sciences has a separate department for training with the name of Dow Vocational Training Center. It is registered/ affiliated with Sindh Board of Technical Education Karachi and National Vocational & Technical Training Commission (NAVTTTC), and conducted Professional Computer Courses as well as regular vocational trainings for faculty/ staff. However, there are some trainings that are specifically designed and offered to females, which includes:

- Basic Dress Making
- Advanced Dress Making
- Fabric Painting
- Candle Making
- Glass Painting
- Mehndi (Basic)
- Macramé Work
- Fashion Designing
- Ceramic Dough
- Sewing
- Textile Designing
- 3D Japanese Paper Art
- Mehndi (Advance)

Moreover, other trainings were conducted, including five days training of “Microscopy”, held from December 30, 2019 to January 03, 2019, November 12 & 13, 2019 and February 09, 2020, 04 days “Refresher Training for Lab technicians on Microscopy FM Training” held from January 22, 2020 to January 25, 2020. This training was also held from November 18, 2019 to November

ڈاؤوڈیو کیشنل اینڈ ریسرچ سینٹر
ڈاؤوڈیو یونیورسٹی آف ہیلتھ سائنسز
لاہور پریس باک، فرسٹ فلور، ایچ ایس ایس پیارکو روڈ، کراچی۔
فون نمبر: (4330, 4331) EXT & 38771111 & 99232660 - 21 - 92 +

Professional Computer Courses
(Morning Program)

⊗ MS-OFFICE (3-Months)	▶ Course Fee: 2600
⊗ Certificate in Information Technology (6-Months)	▶ Course Fee: 3600
⊗ Web Designing (3-Months)	▶ Course Fee: 3100
⊗ Graphics Designing (3-Months)	▶ Course Fee: 3100
⊗ Multimedia Animation (6-Months)	▶ Course Fee: 4100

21, 2019 and 10-days basic ZN Training for Laboratory Technicians held from October 24, 2019 to November 02, 2019 organized by Ojha Institute of Chest diseases (OICD) Training Center.

Educational Outreach Activities

Professor Dr. Saeed Khan, faculty member at Virology Molecular Diagnostics DUHS was invited as a guest speaker in the seminar on Novel Coronavirus organized by The Barrett Hodgson University, Salim Habib Campus held on February 13, 2020. Furthermore, Prof. Saeed Khan delivered a lecture on Novel Corona virus diagnostic challenges at Pakistan Health SUMMIT 2020 on February 25th 2020, organized by Consumer Association of Pakistan Society for Microbiology in collaboration with DUHS and other health institutions.

BARRETT HODGSON UNIVERSITY
The Salim Habib Campus

Centre of Learning and Teaching (CLT)

GUEST LECTURE SERIES

A Novel Coronavirus

Dr. Saeed Khan
Professor at Virology Molecular Diagnostics
Dow University of Health Sciences, Karachi

13th February, 2020
2:15 pm - 3:15 pm
Seminar Room - 1

Consumer Association of Pakistan and Pakistan Society for Microbiology jointly organizing an Health Update Seminar on

Preventing Novel Corona and Other Vector Borne Viral Infections by Sustainable Healthcare Approaches

SCHEDULE

- ◊ Tilawat e Quran Pak
- ◊ Welcome and Inaugural Lectures by Prof. Dr. Shahana (Uroo) Kazmi (President of Pakistan Society For Microbiology) "Corona and other Vector Borne Infections"
- ◊ Prof. Dr. Saeed Khan (Dow University of Health Sciences) "Novel Corona: Diagnostic Challenges"
- ◊ Dr. Shulam Fatima (Civil Hospital Karachi) "Are We prepared for Possible Epidemic of Vector Borne Viral Diseases?"
- ◊ Dr. Saheem Khurshed (National University of Medical Sciences) "Lethality and Pathogenesis of Novel Corona Virus"

Followed by Hands on "Biosafety Training for Handling and Disposing Corona Infected Samples"

Venue: Crystal Ballroom, Marriott Hotel, Karachi

Day: Tuesday, February 25- 2020

Time: 9:30 am - 1 pm

Collaboration:

- ◊ Scientific Society for Microbiology
- ◊ National Society of Hospitalists
- ◊ Dow University of Health Sciences
- ◊ Civil Hospital Karachi
- ◊ National University of Medical Sciences

Moderator:
Dr. Syeda Saifia Hossain
Moderator, Group of Hospitalists
Treasurer of Pakistan Society for Microbiology

Who should Attend ?
Health care facilitators, Medical students, Para medical staff, researchers etc

Why you should attend?
The workshop focuses on the basics of Corona virus and its diagnostic challenges along with its lethality and pathogenesis of Novel Corona Viruses.

Registration details
For Registration contact
ak2ensadaf@gmail.com

Access to the activities

DUHS has a faculty handbook that contains the diversity statement of DUHS, which ensures access to these activities is accessible to all, regardless of ethnicity, religion, disability or gender along with equal opportunity and inclusion for all.

16.3 Gender Equality SDG-05:

The Dow University of Health Sciences practices equal access to resources and opportunities, regardless of gender, including employment, admission and decision-making.

Women applications and entry

The scope of non-discrimination with regards to gender on admission of students is covered in the DUHS Act 2004 (policy document of the university) which states in Clause No. 5.1 Under Section University Open to All “ The University shall be open to all persons of either sex of whatever religion, race, creed, color who are academically qualified for admissions to the courses of study offered by the university and no such persona shall be denied to the privilege on the ground of only sex, religion, creed, race, class, color”.

Furthermore, DUHS demonstrates equal employment opportunity without any discrimination to gender and encourage a participative work culture of equality and professionalism in all the endeavors at DUHS. These aspects include, hiring, learning, development, performance enhancement etc.

Women’s access schemes

Mentoring programs are being offered at constituent Institutes/ Colleges/ Schools at DUHS such as DCOP & DIPM&R. Furthermore, DUHS also have scholarship programs in which different scholarships are awarded to students and Ehsaas Undergraduate Scholarship Program is one of them. It is the country’s largest undergraduate scholarship program provided by the Higher Education Commission (HEC) -Pakistan, in which students are given need and merit-based scholarships, with 50% scholarships reserved for girls.

Maternity and paternity policies

At DUHS, the maternity policy is in place from 2007 as mentioned in the Statutes of DUHS, Maternity Leave Clause No. 11 of the Section, Leaves Statues of DOW University Statues 2007,

which are translation of the Act (policy document for every university). However, the formal policy was created in 2019. As a semi-autonomous organization, we follow all Sindh government rules and regulations, which has granted paternity leave to employees as allowed through the Gazette of Pakistan 2019.

Childcare facilities for students, staff and faculty

Dow University of Health Sciences has Dow Day Care Center which offers charged day care facility to the students, staff and faculty which allow them to continue their studies and ensure work compliance of all the employees. The Day Care provides child care services to infants of age 3 months to 5 years. It maintains good hygienic environment by following standard child care practices under supervision of trained professionals. It also promotes early childhood development by providing facilities and engaging children in physical and interesting age-appropriate learning activities, days celebrations and by providing best hygiene, furniture equipment, meal, snack time, play time & sleeping time. The details can be found at provided web links of Day Care Centers at both campuses of DUHS.



Protection against discrimination

DUHS has formal policy in place for the protection against discrimination, for instance Policy for Grievance of Students & Policy for Grievances of Employee. Besides the formal policy for the said purpose, we also have various forums/ mechanisms in place which deals or allows to report cases regarding such discriminations. "Dow Connect" (<http://dc.duhs.edu.pk/>) is the confidential e-portal for registering complaints/requests of faculty, staff & students regarding discrimination from educational or employment disadvantage. The students can also register their educational matters/complaints to the Academic Committee of DUHS, which meets as and when required and furnish its recommendations/suggestions to the competent authority for approval. Also, the faculty and staff can put up their concerns in the "Grievance Committee", which resolves the cases accordingly.

16.4 Water and Sanitation SDG-06

Dow University of Health Sciences has a functional and reliable water system and proper sanitation facilities, providing adequate levels of clean, safe and sufficient water for all needs of the whole university, especially for toilet use, hand washing and drinking purposes. DUHS measures the total volume of water used in the university that is taken from main supply, desalinated, or extracted from rivers, lakes, or aquifers.

Volume is measured by the size of O/H tanks and the flow meter in both the campuses. Only 5 cubic meter water extract from 6" dia bore hole 100 feet depth for old building DMC Campus.



Process to Treat Waste Water

DUHS encourages the sustainable and eco-friendly environment. Sewerage disposal is separated out and is prevented from entering the main water system. The waste water is collected from building in septic tank then treat it gradually. After treatment, it goes in the main sewerage line of the city. The septic tank is sludge by pumps and are maintained quarterly. The Septic tank (left) is where it is treated gradually before being sent to the main sewerage line of the city (right).



DUHS has a proper process to prevent polluted water entering in the water system, including pollution caused by accidents and incidents at the university. Furthermore, DUHS also support water conservation off campus & utilizes sustainable water extraction technologies on associated university grounds off campus.



Free drinking water for students, staff and visitors

RIVA drinking water is available for free for students, faculty and staff as well as for visitors at Dow University of Health Sciences.



Building Standards to Minimize Water Use

DUHS also minimize the water use in both campuses by using automatic switch system to operate the water supply motor and also by manual valve system which support to over flow the water, losses of water and avoid the damages of buildings. Some examples of water efficient appliances' usage for water conservation measures include; low flush WC's and low flow taps.



Landscapes to minimize water usage

Aloe Vera, Euphorbia and Moringa plants are used in the landscaping of Ojha campus DUHS to minimize water usage, as these plans are drought tolerant and require minimal water usage.



DUHS Actively promote conscious water usage on campus, and in the wider community

Dow University of Health Sciences encourages conscious water usage on campus by displaying “Save Water” posters on various areas of university to promote conscious water usage on campuses, and in the wider community. An interactive session was organized by the Department of Community Medicine – DMC, DUHS on “Water Conservation”.



Support water conservation & Sustainable water extraction technologies on associated university grounds off campus

The Ojha Campus has its own water purification plant, called DOW RIVA Premium Drinking Water, which also delivers water to each campus and surrounding areas.

The water is collected from an underground source within the campus, for use in the campuses and surrounding areas.

Dow's Riva Premium Drinking Water Plant has manufacturing facilities of international standards and can prepare premium quality drinking water up to thirty thousand gallon per day. The water is filled in 19 litre food grade polycarbonate bottles, 1.5 liters and 600 ml PET bottles DOW RIVA premium Health water can be recognized as the Purest, Safest, and Healthiest water in Pakistan.



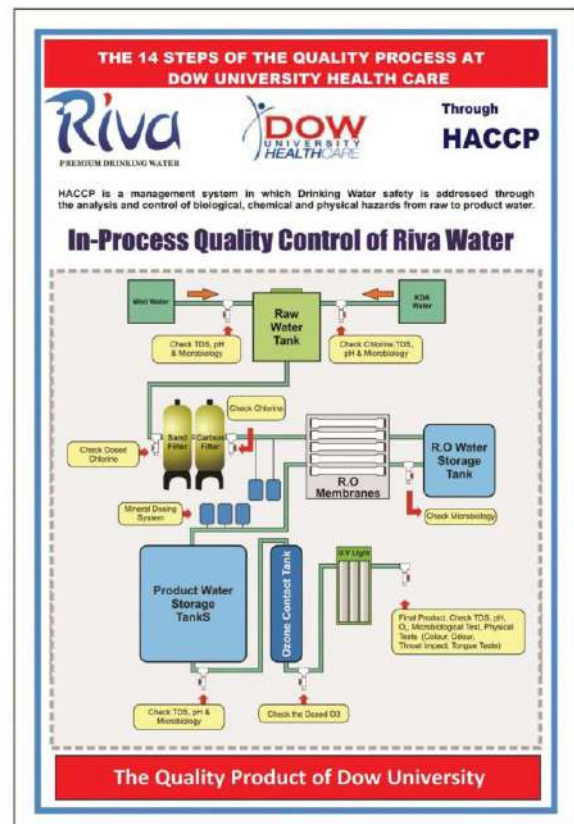


DOW RIVA water's production, filling, packaging, and distribution are truly in line with established international standards.

Riva Premium Drinking Water is processed from an underground source and follows state of the art reverse osmosis (R.O) desalination technology, which is a semi permeable membrane separation process. It completely removes viruses, bacteria, pyroxene and most of the organic compounds. Food grade minerals of best quality are automatically dosed strictly keeping in view of WHO and PSQCA drinking water quality standards. Finally, water is disinfected through ozonation and ultraviolet system. Disinfection of water using ozone and UV is a proven technology.

RIVA Premium Drinking Water is purified through following eleven steps:

1. Chlorination
2. Sand Filtration
3. Activated Carbon Filtration
4. Fine Filtration
5. First Pass RO
6. Microfiltration
7. Second Pass RO
8. Mineralization
9. Microfiltration
10. Ozonation
11. UV Sterilization

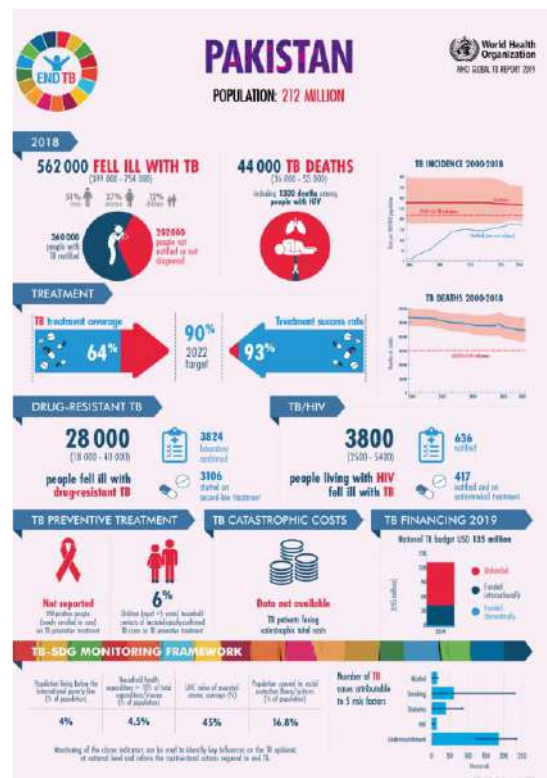


16.5 Partnership for the Goals – SDG 17

Involvement in National government SDG policy development

At national level, Ojha Institute of Chest Diseases- DUHS was involved in:

- Consultative meeting held in Sept, 2019 to develop “National Strategic Plan to End TB 2020-23”, organized by Ministry of National Health Services Regulations and Coordination, Government of Pakistan.
- A meeting on August 22, 2019 on “TB free Sindh Initiative” in collaboration with Stop TB Pakistan and Ministry of Health and population welfare Government of Sindh.
- Providing support as a PMDT site, in collaboration with MDR Unit at NTP for onsite capacity building, evidenced by ‘Annual TB Report Pakistan 2019’, with inclusion of OICD, DUHS in the List of PMDT sites (by region) as implementing partner.
- At regional level, OICD - DUHS participated in:
- Provincial Consultative Meeting- October 18-19, 2019 for Provincial Strategic Plan, Sindh for TB.
- Inter & Intra District meetings on TB DOTS & TB Surveillance in collaboration with PTP Sindh.
- Meeting on January 02, 2020 on “Provincial Committee on Non-Communicable Diseases” organized by Ministry of Health & Population Govt. of Sindh.



Participation in cross-sectorial dialogue about the SDGs

Dow University of Health Sciences hosted 8th International Conference on Endorsing Health Sciences Research to encourage UN Sustainable Development Goals. Furthermore, Institute of Chest Diseases- DUHS participated in cross-sectorial dialogues in Inter & Intra District quarterly meetings on TB DOTS & TB Surveillance in 2019-20 in collaboration with PTP Sindh for management of TB control.

OICD was also involved at local level meetings as a member of “Provincial Committee on Non-Communicable Diseases” for control of NCD’s and their risk factors organized by Ministry of Health & Population Govt. of Sindh. Also, OICD participated in “TB free Sindh Initiative” in collaborated with Stop TB Pakistan and Ministry of Health and population welfare Govt. of Sindh.

OICD, DUHS was also involved in finalizing the “TB Clinical Diagnosis Audit Proposal in Country Context” organized by “The Common Management Unit of HIV/Aids, TB & Malaria”, the aim of the meeting was to re-orient the TB strategy in the country and build relevant action in the next

proposal to the Global Fund and to finalize TB Clinical Diagnose Audit proposal in country context with all country stake holders from National and provincial level.

Participation in international collaboration on gathering or measuring data for the SDGs

The National TB prevalence surveys continue to provide the best methods for directly measuring the number of cases and informing estimates of TB incidence. Since Pakistan is one of the countries in which TB is in prevalence at large, therefore this data is gathered and submitted through the Ojha Institute of Chest Disease- DUHS.

Dow University of Health Sciences Signed letter of agreement with the Food & Agriculture Organization of the United Nation for the provision of Development of Nutrition Behavior Changes Strategy Baluchistan.

Comparative approaches on tackling the SDGs through international collaboration and research:

Dow University of Health Sciences in collaboration with WHO and Canada Pakistan Research Development Council organized 8th International Conference on Endorsing Health Science Research with the major focus no UN Sustainable Development Goals.

Collaboration with NGOs to tackle the SDGs

Dow University of Health Sciences has its own student run non-profit, non-political welfare organizations i.e. Pakistan Welfare Association (PWA) & Dow Patient Care Association (DPCA). PWA was established to help those in need, to remove the despair and unease from the lives of those patients who are struggling with poverty.

Furthermore, DPCA, or Dow Patient Care Association, was founded in 2012 and is a resident non-profit, non-political welfare organization that aims to bridge the gap between needy patients and healthcare.

Dedicated courses that address sustainability and the SDGs

Apart from showing commitment to meaningful education through all programs around the SDGs across the university, that is relevant and applicable to all students, Dow University of Health Sciences also offers dedicated courses (full degrees and electives) that address sustainability



and the SDGs. In this regard, Fundamental of Public Health, Environmental Occupational Health, Reproductive Health & MCH, Community and Preventive Dentistry, Biomechanics and ergonomics, International Relations and Current Affairs, Environmental Sciences, Sociology, Development Economics, Legal & Regulatory Environment for Business and Health Policy Economics etc. are some courses which are offered in BS Nutrition, MS in Public Health, Bachelor of Business Administration, Bachelor of Dental Surgery and Doctor of Physical Therapy.

Dedicated outreach educational activities for the wider community

The School of Dental Care Professionals celebrated World Oral Health Day 2020 to raise public awareness for oral hygiene among under-privileged communities. The Oral Health Awareness Program “Dental Myths and Facts” organized by Dental News Pakistan on January 02, 2020 and invited the Dental Expert Prof. Dr. Ambrina Qureshi from DUHS.



Dental Myths and Facts Debunked by Expert | Dental News Pakistan



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ENDORSEMENT OF THE ANNUAL STANDARDIZED REPORT 2019-20

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