RCRS

RESEARCH CENTER FOR REHABILITATION SCIENCES

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Research center of Rehabilitation sciences is a platform for competent researchers in different domains of physical therapy like neuromuscular, orthopedic manual, sports medicine, women's health and cardio pulmonary Rehabilitation. All of our researchers have post-graduate qualifications with ample research experience in basic and clinical sciences. Moreover, researchers at BUCPT plan to develop the Bahria University Medical and Dental college with a research friendly atmosphere, with not only the aim of working towards developing diverse research expertise but also achieving recognition by applying latest physical agents, virtual and manual techniques in differmotor and neurological problems associated with different levels of disabilities.

BUCPT (BUMDC) has two functional labs with highly sophisticated equipment used for academic as well as research purposes; where onen lab is in the process of develoment focused on the field of biomechanics and ergonomics. The recent developments in rehabilitation sciences have modernized the vision and pattern of treatment which is an evidence based practice. Research in the field of physical therapy not only introduces applications, but contributes significantly to make these a part of our everyday life.

Thematic Areas:

- Neuromuscular rehabilitation
- Orthopedic manual rehabilitation
- Sports medicine rehabilitation
- Women health rehabilitation
- Cardio pulmonary rehabilitation
- Pediatric rehabilitation
- Geriatrics rehabilitation
- Integumentary rehabilitation
- Medical Education

RESEARCH PORTFOLIO

Effect of Balance Training in Older Adults using Wii Fit

Virtual Reality Rehabilitation approach is emerging in Pakistan in past decade. Wii Fit Plus is sub-type of virtual reality. It has revolutionized the traditional concept of physiotherapy, engaging the patient in most diverse, user friendly and entertaining gaming technology for sense of well-being and balance exercises in geriatric population with high degree of acceptability among them with easy instructions. Dr. Ayesha has conducted experimental research on Wii Fit Plus for balance training in community dwelling older adults in 2017. Wii Fit Plus includes different games for balance, aerobics, strength and endurance training. The results showed significant difference among geriatric population. This was the first study in Pakistan on Wii Fit Plus in the field of Physical Therapy.

Effectiveness of Core Stability Exercises with Physio Ball

Un-identified back ache is very common in young female of Pakistan. Weakening of core muscle is the root cause of this type of back ache. The core has been referred to as the 'powerhouse', the foundation or engine of all limb movement. All movements are generated from core and translated to the extremities. Core strengthening has been promoted as a preventive regimen, as a form of rehabilitation, and as a performance- enhancing program for various lumbar spine and musculoskeletal injuries. Dr. Ghousia Shahid is conducting comparative research on two different techniques (With and without Physioball) to improve core stability.

M.O.V.E "Moving Opportunity Via Education

It is a technique to develop functional ambulatory skills. Helping children with severe developmental disabilities and develop the physical skills, they need to sit, stand and walk is a constant challenge for many physical therapist. It combines natural body mechanics with an instructural process design to help child to acquire motoric induction. "MOVE" program design for children over the ages of 8 and above with severe developmental disabilities, was design in 1984 by LINDA BIDABE, U.S.A. Most physical therapist probably used different equipment for special children but they are not trained in "MOVE" approach and need training in MOVE to proper use of equipment for these patients. Dr. Khalid visited California where program was developed in 90's. He spent two weeks to observe the program. Dr. Khalid Aziz was first physiotherapist who applied this technique in Pakistan and results were significant.

All the material wealth cannot be substituted for the spiritual, physical, emotion and mental well-being.

-Lailah Gifty Akita

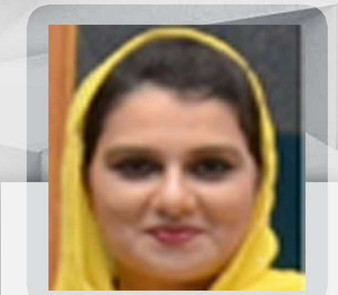
KEY PERSONNEL

Dr. Khalid Aziz

Dr. Khalid Aziz is working as Vice Principal in BUCPT. He has more than 35 years of experience in physiotherapy field as Professional Clinician, Administrator and academic person. He is also the member of National Curriculum Design Committee of HEC for DPT program, also member of Board Of Studies of different public and private physical therapy institutions He has 05 research publications in the field of physiotherapy in national and international journals. He has done his PPDPT/M.Phil from Isra University in 2011, MSc(PT) from University Of Karachi in 2008, did PGD(public Administration) from university of Karachi in 2005, PGC (Rehab) from U.S.A in 1999, ,
PG (Rehab) from Japan in 1990, PGC (Rehab) from UK in 1988 and BSPT from Karachi University in 1980.

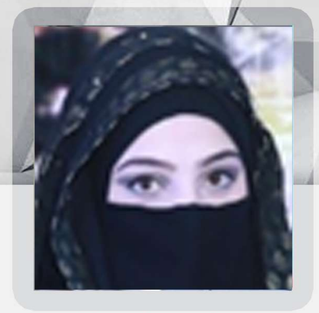
Dr. Abida Arif

Dr Abida Arif is working as Senior Lecturer. She have 11 years of experience in basic and clinical sciences. She did her PPDPT/M.Phil from Isra University Karachi campus. She did her MSc. (PT) from Liaquat National school of Physical therapy. She did BSPT from JPMC. She has 05 research publications in the field of Physical therapy national and international Journals.



Dr. Ghousia Shahid

Dr. Ghousia Shahid working as senior Lecturer in BUCPT, she have 16 years of experience in academic and clinical both capacity. She did her MSc (PT) in 2016, DPT-D in 2013 and BSPT in 2003 from Liaquat National School Of physiotherapy. She has 05 research publications in the field of physiotherapy in national and international medical journals.

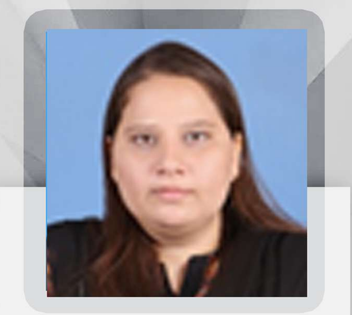


Dr. Ayesha Afridi

Dr. Ayesha Afridi is working as Lecturer in BUCPT. She did her MS (NMPT) in 2016 & DPT in 2014 from Riphah International University, Islamabad. She has 05 years of experience in Clinical & Academics Institutes. Her major field is Neurological Physical Therapy. Her research interest area is on balance rehabilitation for geriatric population. Recently she is working on projects of Physical activity levels among DPT students. She has 09 research publications national and international.

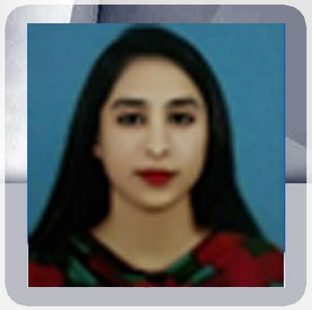
Mr. Faisal Fahim

Mr. Muhammad Faisal Fahim did his B.Sc (H) & M.Sc. in Statistics from University of Karachi. He have more than 6 years of experience as Statistician in Health Sciences. He is currently working as Researcher and Consultant Statistician in BUMDC. He has more than 35 Research Publications in different fields of Health sciences which were published nationally and internationally. He is currently doing a multiple Research Projects in Physical Therapy (BUCPT).



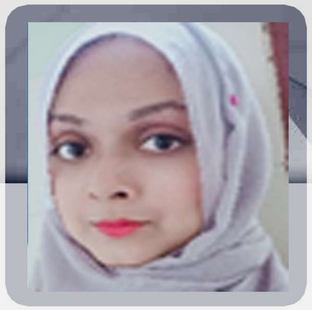
Dr. Rabia Khan

Dr. Rabia Khan currently working as clinical Instructor & Lecturer in BUCPT, she have more than 8 years of experience in clinical and academic fields. She did her BSPT from Baqai Medical University in 2009, DPT-D in 2014 and MSc (PT) in 2019 from Liaquat National School Of physiotherapy. Her research publication in physiotherapy has approved from IJSER, recently working in research project of BUCPT in core stability exercises and her 1 research article is in process of publication in JBUMDC.



Dr.Sayedda Tahniat Ali

Dr.Sayedda Tahniat Ali currently working as clinical instructor & lecturer in BUCPT. She has 2 years of clinical & academic experience. She did her DPT from Superior University in 2017 and MS (Cardiopulmonary physiotherapy) in 2019 from Riphah international university. She is currently working on research projects in ICU techniques of advance cardiac rehabilitation.



Dr.Ambreen Shahzad

Dr.Ambreen Shahzad is working as Lecturer in BUCPT. She has experience of 5 years in clinical & teaching core subjects of Physiotherapy to undergraduate and postgraduates. She has been an active member for conducting many CME and workshops related to Physiotherapy. She has different international publications. She did her M.S from Dow University of Health Science, 2015, DPT (D) in 2018 and B.S. (Physiotherapy) from Liaquat national school of Physiotherapy in 2008.