

# The prospect of health informatics in Bangladesh

## STAR HEALTH REPORT

Health informatics is the discipline at the intersection of healthcare, information science and computer science. It is one of the most rapidly expanding field in the healthcare worldwide. In Bangladesh, it is also getting the attention slowly. There are some institutions coming forward with the aim to build professional expertise in the country.

Bangladesh University of Health Science (BUHS) is pioneer among them.

The discipline has demand in the government, NGO and development organisations. The increasing demand within healthcare both locally and internationally is getting traction with the growing need of the huge population in the countries like Bangladesh.

Health informatics integrates data with patient care using cutting edge technology and thus improves the healthcare delivery and access to care; health education and biomedical research; disease prevention; diagnosis; monitoring treatment and outcome; coordination between organisations and healthcare professionals.



Health Informatics connects people, technology, and data to better improve healthcare outcomes and safety by supporting operational, innovation and technological advancements globally.

BUHS has introduced a masters programme which aims at developing professionals to meet the growing demand in country and abroad. The minimum requirement is an undergraduate degree in medical, dental, nursing, pharmacology or allied health sciences, computer and information sciences or its equivalents from any recognised university.

Dr Sharmin Parveen, Head of the Department of Health Informatics at BUHS informed

that their programme was the first masters programme in the region solely on health informatics. They run flexible evening and weekend classes. They deliver courses on highly proclaimed and internationally praised curriculum.

A country like Bangladesh, where we often lack systematic research data in many fields of healthcare, the demand of health informatics is enormous to build the digital platform for measuring and analysing the epidemiologi-

cal variables and indicators.

The discipline has career prospect in the government and military setup, NGOs, UN organisations, healthcare delivery institutes, medical device and technology companies, medical software companies, healthcare consulting firms, insurance companies, public health organisations and academia.

Depending on the background and field of application, students can be a health infor-

mation system analyst, monitoring and evaluation specialist, consultant, trainer, project manager, researcher, academician, application specialist, medical information officer, clinical data analyst, health informatics specialist, public health informatics specialist, clinical coordinator or any other relevant professional.

Dr Ali Haider Rashidee, President and CEO of eHealth Solutions and a faculty of BUHS explained, "Health informatics is the ultimate basis of developing a proper Electronic Medical Record (EMR) system. It can lead to the political leadership in healthcare by visualising data to the patients to help them realise the benefit of interventions." He also added, "Given the context in Bangladesh, health informatics is not an option but an imperative to improve clinical, financial, societal and national outcomes in healthcare."

The world is advancing way too far incorporating artificial intelligence in every front of technology including the healthcare. Developing health informatics professionals is a demand of time to step into the digital healthcare dividend.

## LOW COST RX



### Apollo organised a patient-forum for paediatric cardiology

Apollo Hospitals Dhaka recently organised a patient-forum for the paediatric cardiology department. Clinical and Interventional Paediatric Cardiologist Dr Tahera Nazrin delivered the keynote speech in the event.

Dr Tahera said, "Heart diseases of children are curable and preventable. Unusual holes in the heart detected early and closed timely can lead the child to lead a normal life." Such holes can be closed by using devices and the patient needs to be in hospital for two days only.

Apollo Hospital's paediatric cardiology department is doing such interventions (ASD, VSD, PDA) without any surgery at a very low cost. The hospital provides a package where devices are available at a very subsidised price for the underprivileged children who cannot afford the treatment otherwise.

A panel of renowned cardiologist and physicians including Prof Dr A Q M Reza, Coordinator and Senior Consultant of Cardiology; Dr Ratnadeep Chaskar, COO; Prof Dr Mohammed Istiaque Hossain, Coordinator and Senior Consultant, Paediatrics were present and shared experiences. Other senior management officials and consultants were present in the programme also.

## HEALTH bulletin



### Having more than one chronic disease amplifies costs of diseases

Having two or more non-communicable diseases (multimorbidity) costs the country more than the sum of those individual diseases would cost, according to a new study published recently in PLOS Medicine by Tony Blakely from the University of Otago, New Zealand, and colleagues.

Few studies have estimated disease-specific health system expenditure for many diseases simultaneously. In the New Work, the researchers used nationally linked health data for all New Zealanders, including hospitalisation, outpatient, pharmaceutical, laboratory and primary care from July 1, 2007 through June 30, 2014.

These data include 18.9 million person-years and \$26.4 billion US in spending. The team calculated annual health expenditure per person and analysed the association of this spending to whether a person had any of six non-communicable disease classes — cancer, cardiovascular disease, diabetes, musculoskeletal, neurological, and lung/liver/kidney (LLK) diseases — or a combination of any of those diseases.

## Role of physiotherapy for military forces

### ZAHID BIN SULTAN

Physiotherapy has a significant role for the military populations to maintain sound health and prevent injuries associated with physical training and sports. Nowadays qualified physiotherapists are working in military forces as a physiotherapy officer in many countries like Australia, Canada, United Kingdom and also in Bangladesh. Physiotherapy officers assess and treat force members for musculoskeletal injuries and conditions. They design treatment plans for a variety of orthopaedic, cardio-respiratory, neuro-musculoskeletal and sports physiotherapy issues.

#### Common musculoskeletal problems of the military

Musculoskeletal injuries are a major problem in military populations. Physical training and recreational sports are the primary causes of these musculoskeletal injuries.

- Tibial bone stress reaction (pain on the shin area)
- Patellofemoral syndrome (injury resulting from the repetitive movement of the knee cap against the thigh bone)
- The iliotibial band friction syndrome (pain in the outer side of the knee)
- Knee injury (ligaments or meniscus tear)
- Stress fractures (a stress fracture is a small crack in a bone, or severe bruising within a bone)



#### Ankle sprain (partial or complete tear of ligaments in the ankle)

- Groin pull (pain and tenderness at groin and inside the thigh)
- Hamstring strain (tear of the back side of thigh muscle)
- Rotator cuff injury (shoulder pain due to repetitive overhead activity)

#### Role of physiotherapy for the military

- Maintain and improve the fitness of soldiers through a wide range of injuries management and prevention
- Assess the medical condition of patients and the mechanism of injury

- Develop a treatment plan to reduce pain and promote movement and functional ability

- Prevent musculoskeletal pain and deformity by maintaining a proper body position during training and sports

- Correction of abnormal body biomechanics and reduce pressure on the overuse part of the body by taping and bracing
- Administer physical therapy treatments to patients, for example therapeutic stretching and strengthening exercises, manipulation, therapeutic massage, dry needling and some pain relief modalities like LASER, ultra sound therapy, shock wave, and spinal decompression therapy that consist of less side effects than the pain relief medications.

- Instruct, motivate and assist patients to improve functional activities
- Rehabilitate patients in a field environment

- Deal with multiple traumas

Physiotherapy intervention has significant role in the prevention of injuries and maintaining the overall fitness for the military. Properly planned physiotherapy intervention will increase working performance, readiness and reduce the medical cost.

The writer is a neurodynamic specialist and clinical physiotherapist at BRB Hospital Ltd.  
Email: ranacrpphysio@gmail.com



### Saaol's 10 successful years in heart treatment without operation

Saaol Heart Center, Bangladesh celebrated her 10<sup>th</sup> Birth Anniversary with a slogan of 'Successful 10-years of Heart Treatment without any Ring and Operation' on January 9, 2019 — says a press release. On this occasion, a day-long free-medical consultation was arranged for the patients at their branches in Dhaka and Chittagong. More than 200 patients were served at each branch.

Founder of Saaol Bangladesh poet Mohon Raihan told in his inaugural speech, "Introducing Saaol Treatment Method in Bangladesh and making it acceptable here was a big challenge. We overcame that challenge and kept more than 30,000 patients fully cured throughout the last 10 years. We are running the social movement of changing food habit and lifestyle launching oil free foods of oil-free kitchen and café, disease-based foods, home delivery and catering, free Seminars on heart, yoga and diet. You all, please come forward for this social movement".

The Chief Guest, retired Consultant Surgeon General of Bangladesh Armed Forces Bijoy Kumar Sarkar told, "I became a supporter after getting convinced upon reading the book 'Reversal Heart Disease' written by US legendary physician Dr Dean Ornish. And hence I get connected with the Saaol's complete lifestyle programme of heart disease treatment in Bangladesh. I convene everyone that you also should come forward on the service of humanity".

/StarHealthBD



### Orion Pharma Scholarship for Medical Student

#### ডাক্তারবিহুন একটি সুস্থ, সুন্দর এবং সাবলীল সমাজ কি চিন্তা করা যায় ?

ডাক্তার হওয়ার স্বপ্ন অনেকেরই, কিন্তু অনেক সময় শুধু আর্থিক সংকটের কারণে আজন্ম লালিত স্বপ্ন মুল হয়ে যায়।  
মেই সব স্বপ্নবান, সভাবনাময় মেধাবী শিক্ষার্থীদের লক্ষ্য অর্জনের সহযোগিতার জন্য ওরিয়ন ফার্মা ওয়েলফেয়ার ট্রাস্ট

যারা আবেদন করতে পারবেন

সকল সরকারী মেডিকেল কলেজে সদৃ ভর্তীকৃত ১ম বর্ষের অসচল ও মেধাবী শিক্ষার্থী ।

৩১ জানুয়ারি ২০১৯-এর মধ্যে

আবেদনপত্রটি ওরিয়ন ফার্মা ওয়েলফেয়ার ট্রাস্ট

ওরিয়ন ফার্মা ওয়েলফেয়ার ট্রাস্ট

ওরিয়ন হাউজ, ১৫০-১৫৪, তেজগাঁও শিল্প এলাকা, ঢাকা-১২০৮।

মেইল: abdullah.arafat@orion-group.net, saifuz.zahan@orion-group.net

মোবাইল: +৮৮০১৭০৯৬৫২৩১৫, +৮৮০১৭০৯৬৫২৩১৬

### প্রয়োজনীয় তথ্যাবলী

- নিজ মেডিকেল কলেজের অধ্যক্ষের প্রত্যনপত্র, পূর্ণকৃত আবেদনপত্র, জাতীয় পরিচয় পত্র/ স্ট্রাট কার্ড এর ফটোকপি
- অভিভাবকের বাসসরিক আয়ের সনদপত্র (ওয়ার্ড কমিশনার/ ইউপি চেয়ারম্যান/ নিয়োগদাতা প্রতিষ্ঠান কর্তৃক সত্যায়িত), ২ কপি পাসপোর্ট সাইজের সত্যায়িত ফটোকপি
- সকল শিক্ষাগত যোগাতার সনদপত্র এবং নথরপত্রের সত্যায়িত ফটোকপি
- নিজ মেডিকেল কলেজ থেকে রেজিষ্ট্রেশনের সত্যায়িত ফটোকপি

