About DICE:

Doctors Worldwide Improving Care in Health Emergencies

The DICE programme is an emergency medicine training programme that aims to bridge the gap between primary care and secondary care by providing hands-on clinical supervision and training for Bangladeshi doctors, nurses and medical assistants who are regularly managing acute or life-threatening conditions within 24/7 Primary Healthcare Centres (PHCCs) across the Rohingya refugee camps in Cox’s Bazar.

Since April 2020 with the support of IOM, we have been developing the emergency care infrastructure and delivering weekly training on emergency care at 4 x 24/7 PHCCs and an additional 7 Health Posts (HPs).

Through the DICE programme training and mentorship, we strengthened the emergency care available in the camps whilst strengthening the primary care interface to overall improve the quality of care.

DICE’s Focus:

Over 30 Emergency Medicine topics were delivered with skills-based training to save critically ill or injured patients including:

- Neonatal life support
- Obstetric emergencies
- Paediatric life support
- Trauma support
- Basic life support
- Advanced life support
- A to E scenarios

“DICE has taught me how to deal with health emergencies in low resource settings. Serving in health emergencies with the available assets has become easier after receiving training from the DICE course.” - DICE Participant

“DICE has taught me how to deal with health emergencies in low resource settings. Serving in health emergencies with the available assets has become easier after receiving training from the DICE course.” - DICE Participant

“The DICE programme in short aims to improve the quality of acute patient care and to preserve and protect human dignity by investing in training, mentorship, and health systems strengthening to the local healthcare providers in a crisis response. By building trust between communities and healthcare through better care, our participants will be leaders in the Bangladesh health response for years to come.” - Georgia Venner, Project Manager Doctors Worldwide.

To Date DICE Has Achieved:

- 45 Comprehensive Training Sessions (141 Hours)
- 115 Doctors, Midwives & Nurses Trained
- 394,940 Patient Consultations Benefited
- 7 Medical Experts Deployed To Teach The Programme In-person
- 52 Field Visits For Mentorship, Training And Health Facility Strengthening
- 4 Obstetrics Emergency Conferences
- 11 Primary Care Clinics Benefited
- 33 Medical Experts Contributed To The DICE Teaching Programme
- 31 Certificates In BLS Distributed
- 74 Midwives/Doctors From 42 Clinics Attended The Obstetric Emergencies Conference
- 16 Acute Care Protocols Built
Key impact from field visits and mentorship include:

Comprehensive Emergency Unit (EU) Facility Improvement Plans (FIP plans) created and implemented for 3/4/7 PHCCs and HPs

2 PHC 24/7 EU layouts drastically improved with 360 degree access and affording patients more privacy, confidentiality, staff and patient safety, and workspace ergonomics

2 ABCDE Crash trolleys re-stocked and re-organised with comprehensive training provided to clinical staff.

Greater service improvement from EU staff and higher demonstration of confidence and leadership towards their colleagues

Improving EU patient follow up by implementing new clinical administrative systems to track patients discharged from EU

Emergency care: A total of 121 staff from all service categories were trained on Basic Life Support. In addition, a standardised and streamlined model for a resuscitation room was designed to enable optimal care for emergency patients presenting to any of the PHCs.

Triage: After triage mentorship, wait time was reduced from 2+ hours to 20 minutes and screening for flu symptoms was carried out by a nurse to better assess patients as soon as possible.

Primary care: Significant mentorship and observation was dedicated to critical chronic disease patients to provide better long-term care, including the implementation of new NCD registries and follow up patient cards.

Maternal health: Midwives and relevant staff who see maternal health patients were given comprehensive on-site training in our new postpartum hemorrhage protocol to save lives.

Patient referrals: Significant observations and recommendations were made to improve the referral process in the field clinics and reduce transfer times for urgent and complex cases to tertiary care centres.

Facility Improvement Plan highlights:

EU layout rooms reorganization to achieve 360 degree access

ABCD DECrash trolley catalogued and stocked and trained up staff

EU administrative organisation of paperwork improved with nurses

EU patient follow up implemented with patient registry

Working towards consistently providing escorts for high-risk patients for referrals with upper management

Arrangement of rotating visit of senior consultants once or twice a week

Implementing PH messaging with TV in waiting room

Establishing with higher authority standardised version of essential medicines

19 Quality Improvement Projects (QIPs) created by local staff identifying areas of improvement to better the quality of healthcare in clinics including:

• Creating and implementing a visual aid for stages of cervical dilatation
• Devising protocols to standardise treatment for common primary care presentations
• Creating and implementing patient held records for chronic disease monitoring
• Patient Dignity and Respect
• Reformed Emergency Room
• Short and Easy Referral Pathways
• Patient Satisfaction
• Non-communicable Disease Corner
• Safe Deliveries
• Improving Patient Followup for Emergency Unit cases
• Improving referral system process in the refugee camps
• Refurbishment of ABCDE trolley bag in the EU
• Decreasing wait times for patients
• Improving Flu Corner layout to decrease disease transmission
• Improving crowd control and decreasing transmission of COVID-19

“Save a Life. Change a Life.”

*The DICE Programme is a comprehensive systems strengthening project to improve the delivery of Emergency Care in the Primary Healthcare Centres (PHCCs) of the Rohingya Camps. These PHCCs form the health focal point for both the Rohingya community and the host community, who until recently, have very little access to quality healthcare. Even though DICE does have a profound effect on the humanitarian health sector of Bangladesh, its implications reach far deeper for the nation as a whole. It is the first programme of its kind in the entire country that delivers all the essentials of emergency care to all categories of clinical care providers. I am sure that its success will be a catalyst for the introduction of Emergency Care as a new medical specialty in Bangladesh.* Dr Mir Saaduddin Ahmad, MBBS, MRCS, MRCEM, FRCEM, DICE Training Programme Director.

To date, the impact of the DICE Programme has led to:

• Improved quality of patient care and clinical governance in Primary Health Care Centres (PHCCs) through mentorship and health system strengthening focusing on emergency care.
• Significant improvement in triage and patient flow through training and recruitment of Rohingya volunteers in healthcare facilities to assist staff and communication.
• Sufficient stocking of essential medicines for acute care needs in primary care clinics.
• Improved patient flow and reduction of patient wait times through comprehensive triage training to healthcare workers responsible for patient intake in targeted clinics.
• Creation of 16 easy-to-use protocols focusing on acute care management.
• Empowerment of 5 Dignity Champions (a key healthcare professional who will act as a focal point for training and quality initiatives in each clinic) to ensure patient privacy and dignity in primary care clinics is improved and monitored.
• One additional primary care clinic that sees an average of 1,500 patients per week, (of which, 50-75 are maternal health patients), was fully rehabilitated (outside and inside structure, emergency medicine stocks, triage desk and patient flow) to serve patients better and support healthcare staff.

Protocols Developed by Doctors Worldwide:

• Protocol for systematic triage that ensures patients are seen in order of acuity
• Protocol for initial approach to ABCDs (airway, breathing, circulation, basic neurologic function)
• Protocol for volume resuscitation of children and adults
• Diabetic ketoacidosis (DKA)
• Asthma exacerbation
• Protocol for post exposure prophylaxis for healthcare workers
• Neonatal Resuscitation
• Fluid Management
• Postpartum Hemorrhage
• Anaphylaxis
• Patient privacy & safety
• Tachycardia
• Bradycardia
• Eclampsia in Maternal Patients
• Adult Cardiac Arrest Algorithm for Primary Healthcare Hospitals

“DICE has taught me how to deal with health emergencies in low resource settings. Serving in health emergencies with the available assets has become easier after receiving training from the DICE course.” Dr Andrene Hamilton, Obstetrics and Gynaecology Specialist from Doctors Worldwide.

Monowara Gani, CEO Doctors Worldwide.

“"As a Clinic Manager, I have noticed a significant positive change within my other clinical staff who also participated in the DICE program that is highly beneficial for our services." - DICE Participant

“"DICE has taught me how to deal with health emergencies in low resource settings. Serving in health emergencies with the available assets has become easier after receiving training from the DICE course.” - Dr Mir Saaduddin Ahmad, MBBS, MRCS, MRCEM, FRCEM, DICE Training Programme Director.

FRCEM, DICE Training Programme Director.

“Protocol for post exposure prophylaxis for healthcare workers...”

“"We have a great opportunity to develop the emergency healthcare provision in the Rohingya and surrounding host population in Cox’s Bazar. The project so far has demonstrated significant impact and improvement, and we are hopeful that it will develop into a landmark piece of work which can contribute towards the provision and development of emergency medicine in Bangladesh, a specialistism that currently does not exist." - Monowara Gani, CEO Doctors Worldwide

“Increased saturation, Obstetrics and Gynaecology specialists from Doctors Worldwide and the Bangladesh Obstetrics and Gynaecology Society (BOGSA) implemented the comprehensive Obstetrics Emergency Training sessions.”

“Improved EU patient follow up...”

“Stronger focus on management of Emergency patients...”

“360 degree access and affording patients more...”

“...with comprehensive training provided to clinical staff...”

“Significant improvement in triage and patient flow...”

“DICE has taught me how to deal with health emergencies in low resource settings. Serving in health emergencies with the available assets has become easier after receiving training from the DICE course. “ - Monowara Gani, CEO Doctors Worldwide.

“...with comprehensive training provided to clinical staff. Greater service improvement from EU staff and higher demonstration of confidence and leadership towards their colleagues."..."
Doctors Worldwide is a specialist medical charity based in the UK. Our mission is to support and collaborate with local communities in order to build and sustain quality healthcare services in both development and emergency settings. Over the last 20 years we have delivered over 103 medical projects, responded to 13 humanitarian crises and worked in 25 different countries. Together we have impacted more than 3.7 million lives and counting. Access to quality healthcare is not a privilege, it is a human right, and we work towards making that a reality, especially for the most vulnerable communities.