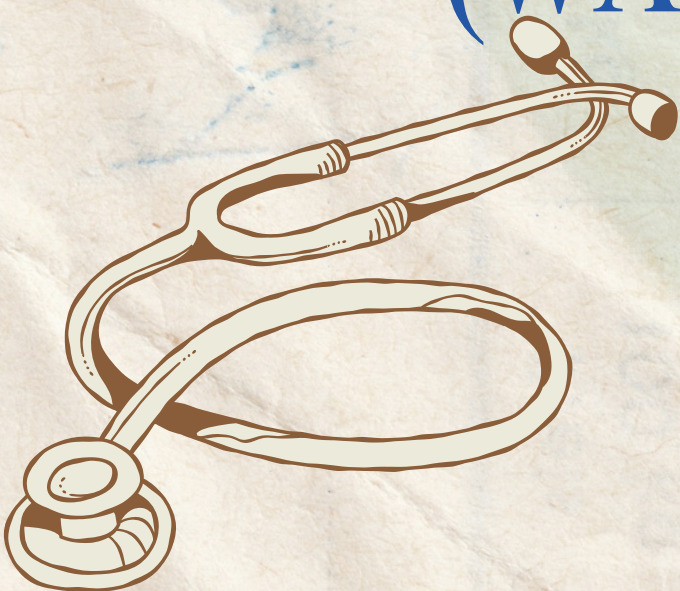


World Academic Council of Emergency Medicine  
Table-Top exercise and Communication in Disaster Medicine  
(WACEM-TOPCOM NEPAL)

2023



"Health institutional Disaster Response and Intra or Interdepartmental and Interhospital communications and coordinations"

## WACEM - TOPCOM

World Academic Council of Emergency Medicine -  
Tabletop Exercise and Communication in Disaster Medicine

## Keynote Speakers



**Dr. Sagar Galwankar**  
Academic Director  
WACEM



**Datuk Dr. Mohamed Alwi Bin Hj Abdul Rahman**  
HOD Emergency Department  
Selayang Hospital,  
Malaysia



**Dr. Sanjeev Bhoi**  
Professor of Emergency Medicine  
All India Institute of Medical Sciences (AIIMS)  
India



**Dr. Sandeep Sahu**  
Professor of Anesthesiology,  
Consultant Emergency and  
Trauma  
Sanjay Gandhi Postgraduate  
Institute of Medical Sciences  
Lucknow, UP, India.



**Dr. Pia Daniels**  
State University of New York  
Downstate Medical  
New York, USA



**Prof. Bonnie Arquilla**  
State University of New York  
Downstate Medical  
New York, USA

## Organizing Team



**Organizing Chair**  
**Prof. Dr. Bala Ram Malla**  
Medical Director,  
DHKU



**Organizing Secretary**  
**Dr. Samjhana Basnet,**  
Department of General Practice and  
Emergency Medicine, DHKU



**Prof. Dr. Rajeev Shrestha**  
Chief, Research & Development  
Division, DHKU



**Prof. Dr. Binita Pradhan**  
Department of General Practice &  
Emergency Medicine,  
Kathmandu Medical College



**Dr. Ashish Shrestha**  
Department of General Practice &  
Emergency Medicine,  
Patan Academy of Health Science



**Dr. Sanjay Karki**  
Department of Emergency  
and Pre-Hospital Care  
Nepal Medciti Hospital



**Prof. Dr. Abha Shrestha**  
Department of Obstetrics &  
Gynecology, DHKU



**Prof. Dr. Jeevan Singh**  
Department of Anesthesiology &  
Critical Care, DHKU



**Dr. Sangina Ranjit**  
Department of Anesthesiology &  
Critical Care, DHKU



**Dr. Rohit Shrestha**  
Department of Orthopaedics &  
Traumatology, DHKU



**Prof. Dr. Dipak Shrestha**  
Department of Orthopaedics &  
Traumatology, DHKU



**Mr. Pradhuma Shrestha**  
Hospital Administrator,  
DHKU



**Ms. Radha Acharya Pandey**  
Nurse Manager, Department of  
Emergency, DHKU



**Dr. Yagya Ratna Shakya**  
Department of General Surgery,  
DHKU



**Dr. Sannu K. Shrestha**  
Department of General Practice &  
Emergency Medicine, DHKU



**Prof. Dr. Roshana Shrestha**  
Department of General Practice &  
Emergency Medicine, DHKU



**Dr. Anmol Purna Shrestha**  
Department of General Practice &  
Emergency Medicine, DHKU



**Prof. Dr. Anjana Dongol**  
Chief, Education and Training  
Division, DHKU



**Dr. Shalesh Prasad Shrestha**  
Department of General Practice &  
Emergency Medicine, DHKU



**Dr. Raj Kumar Dangal**  
Department of General Practice &  
Emergency Medicine, DHKU



1<sup>st</sup>

INTERNATIONAL CONFERENCE

ON

DISASTER PREPAREDNESS & MANAGEMENT

2023



December 1-3, 2023



Dhulikhel Hospital, Kavre, Nepal



<https://dhulikhelhospital.org/>



Contact persons:

Dr. Monisma Malla

+977-9851247735

Dr. Bivek Bhandari

+977-9849145949

Dr. Samjhana Basnet

+977-9851205097

[wacemtopcomnepal@kusms.edu.np](mailto:wacemtopcomnepal@kusms.edu.np)

Click here to go to website or register



Scan this qr code  
for website



Scan this qr code  
for registration



## Introduction:

Tabletop exercise is a focused tools and comprehensive exercises adopted by international agencies for emergency management. These exercises assemble key personnel responsible for emergency roles to simulate various crisis scenarios in a non-threatening environment with the purpose of clarifying roles, responsibilities, and identifying areas for mitigation and enhance emergency preparedness.

This conference will unite global experts to share knowledge and best practices in disaster medicine and emergency management. It aims to strengthen existing Hospital Disaster Response Plan and intra/interdepartmental as well as interhospital communication and coordination during disasters. Participants will have the opportunity to expand their professional networks, reconnect with colleagues, savor the breathtaking scenery, and experience the warm hospitality of Nepal.

Join us at the First International Conference on Disaster Preparedness and Management, WACEM-TOPCOM, in the Himalayan town of Nepal, Dhulikhel, Kavrepalanchowk at Dhulikhel Hospital, Kathmandu University School of Medical Sciences, organized by Ministry of Health and Population, Government of Nepal and supported by various national and international agencies.

## Program Overview

### 1st December, 2023 (Day 1)

**Time : 8 am - 5 pm**

**Pre-Conference Workshop** (hands-on skills, Didactic lectures, skill stations and discussion.)

1. Point of Care Ultrasound in Disaster
2. Wilderness Medicine
3. CBRNE (Chemical, Biological, Radiological, Nuclear, and high yield Explosives), and Decontamination
4. Pre-hospital care and hospital disaster preparedness plan and Coordination

**Honor Lecture**

**Panel Discussion**

**Inauguration:** 3pm - 5pm

### 2nd December, 2023 (Day 2)

**Time : 7 am - 4:30 pm**

**Pre-conference workshop**

1. Essential of Critical Care Course
2. Disaster-Mass Causality Incident and Drill

**Honor Lecture**

**Conference -Tabletop Exercises**

**Plenary Sessions**

**Disaster Management Experience Sharing**

Pearls and Pitfalls of Disaster Response

### 3rd December, 2023 (Day 3)

**Time : 8 am - 3 pm**

**Honor Lecture**

**Conference: Tabletop exercises**

1. Drill Preparation
2. Tabletop exercises
  - Disaster Resilience and Model City
  - Hazard Vulnerability Analysis
  - MOU collaborative partner and disaster response
3. Press conference
4. Closing

## Features:

- Pre-Conference Workshop
- Plenary Session
- Panel Discussion
- Tabletop Exercises
- Poster Abstract / Case Study

## Aims:

- To develop technical and non-technical knowledge, skills and attitudes during disaster response.
- To improve Disaster response under Hospital Incident Command System (HICS) implementation.
- To improve leadership skills during Disaster response.
- To improve patient and healthcare workers safety during Disaster.
- To improve Intra or Inter Departmental and Interhospital communication and coordination skills.
- To strengthen hub and Satellite hospitals networking.

## Participants:

**Disaster Coordinator and Disaster focal person** of all the Hub Hospitals of Nepal, Consultants/Senior Consultant/Junior faculty, residents, medical officers, Nurses/paramedics of ED/Anesthesia and Critical Care/Surgery/Ortho/Medicine/admin staff (Logistics, finance handling, Hospital Directors)/Intern Medical doctors of Kathmandu University Hospital affiliated medical colleges, EMS personnel and major Health institute of all over Nepal, SAARC and overseas.

**1<sup>ST</sup> International Conference on Disaster Preparedness & Management**  
**World Academic Council of Emergency Medicine**  
**Table-Top exercise and Communication in Disaster Medicine**  
**(WACEM-TOPCOM NEPAL)**

**Program Schedule**

Day 1: Pre-conference December 1, Friday				
Time	Topic	Chairperson	Remarks	
07:30-08:00	Registration		Registration desk: Dr. Bibek	
	Sign up for workshops		Dr. Monisma Alisha Suwal	
	Breakfast		Shiva Neupane	
08:30-12:30	<b>Pre-conference Workshops:</b> Lectures, Demonstration and Hands-on skill sessions			
Note: All pre-conference Workshops of Day 1 are run simultaneously. Participants are requested to sign up online for the one you are interested in. <b>Tea break: 10:30-10:40am</b>				
Time	Topic	Facilitators	Moderator	Remarks
08:30-12:30	<u>Workshop 1:</u> <b>Point of Care Ultrasound in Disaster</b>	<b>Dr. Tej Prasad Sinha</b> Dr. Archana Nair Dr. Roshana Shrestha Dr. Anmol Purna Shrestha Dr. Sumarga Simkhada Dr. Samjhana Basnet	Chair: Dr. Santosh Poudel, Bir Hospital  Moderator: Dr. Roshana Shrestha	Hall A  (BLS HALL)
08:30-12:30	<u>Workshop 2:</u> <b>Wilderness Medicine</b>	<b>Dr. Alwi</b> Dr. Gurjeet Singh A/L Harvendhar Singh Dr. Nabil Muhammad Bin Al Kuddoos Dr. Damien Santer Lt Kol Jamal Bin Mallik Dr. Nishant Raj Pandey Dr. Rajkumar Dangal Dr. Rajeev Shrestha	Chair: Dr. Manisha Rawal; Teku Hospital  Moderator: Dr. Rajeev Shrestha	Hall B  (SKILL LAB + Classroom 1 <sup>st</sup> floor)
08:30-12:30	<u>Workshop 3:</u> Incident command System Simulation (tabletop) <b>CBRN (Decontamination)</b>	<b>Dr. Bonnie</b> Dr. McMahon Dr Pandey Dr. Nabil Muhammad Bin Al Kuddoos Dr. Damien Santer Lt Kol Jamal Bin Mallik Dr. Arquilla (Drill) Dr. Shailesh Prasad Shrestha Dr. Yagya Ratna Shakya	Chair: Dr. Bishnu Psd Shama; Patan Hospital  Moderator: Dr. Yagya Ratna Shakya	Hall C  (Classroom 1 <sup>st</sup> floor)

**1<sup>ST</sup> International Conference on Disaster Preparedness & Management**  
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09:00-10:00	<u>Workshop 4:</u> <b>Helicopter emergency Medical service (Air) and it's development in Nepal</b>	Dr. Sanjay Karki	Chair: Dr. Sandeep Sahu	Hall D Online  (Classroom 1 <sup>st</sup> floor)
10:00-10:30	<b>Experience sharing in Pre - Hospital Care</b>	Dr. Sanu K. Shrestha)	Moderator: Dr. Sanu Krishna Shrestha	
10:30-1200	<b>HOSPITAL DISASTER PREPAREDNESS PLAN (HDPRP)</b>	WHO Nepal (Dr Subhash)		
12:15-13:15	<b>LUNCH</b>			<b>POSTER PRESENTATION</b>
13:15-13:35	<b>Honor lecture: Emergency preparedness and Response in Nepal</b>	Dr. Prakash Budathoki (HEOC)		Auditorium Hall
13:35-14:15	<b>Panel Discussion Leadership in Disaster Management</b>	<b>Panelist</b> 1. MOHP 2. Dr. Pradeep Vaidya (HOPE, TUTH) 3. KMC Principal 4. NMC Principal 5. Dr. Subash (WHO) 6. Dr. Prakash Budhathoki (HEOC) 7. Dr. Bharat Yadav	Chair Dr. Dipendra Raman Singh (MOHP)  Co-Chair: Dr Rupak Maharjan/ APF representative  Moderator: Dr. Samara	
14:15-15:00			Tea Break	
15:00-17:00	<b>Opening Ceremony</b>			
17:00-18:00	<b>Executive Meeting</b>			International Faculties. KU, Directors, Organizing committee, WHO Nepal, WHO SEARO

**1<sup>ST</sup> International Conference on Disaster Preparedness & Management**  
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Day 2: Pre-conference and TOPCOM Conference  
December 2, Saturday

Time	Topic	Facilitators	Remarks	
07:00-07:30	Registration			
09:00-11:30	<u>Workshop 5:</u> <b>Disaster mass causality Incident and Drill</b>	<b>Dr. Bonnie</b> Dr. Soghoian Dr. Alwi Dr. Kharel Dr. Pandya Dr. Rohit Shrestha	Chair: Dr Anil Karki (President NMA) Co-Chair: Dr. Sanjeev Tiwari (General secretary NMA)  Moderator: Dr. Rohit Shrestha	Hall A  (Auditorium)
07:30-11:30	<u>Workshop 6:</u> <b>Essentials of Critical Care</b>	<b>Dr. Sandeep Sahu</b> Dr. Abhilash Chandra Dr. Ruchi Verma Dr. Divya Srivastava Dr. Dharmendra Uraiya Mr. Ramnaresh Dr. Sangina Rangit	Chair: Dr Mohan Raj Sharma; TUTH director  Moderator: Dr. Sangina Ranjit	Hall B  (BLS Hall)
11:30-12:10	<b>Honor Lecture</b>  Emergency Care in Nepal-A multipronged approach with a lens on Disasters  Lesson learnt in establishing Emergency Care in Ghana	<b>Dr. Ramu Kharel</b>   <b>Dr. Samara Soghoian</b>	Chair: Dr. Tej Prasad Sinha Co-chair: Dr. Ramesh Makaju  Moderator: Dr. Jeevan Shrestha	Auditorium hall
12:10-12:30	Role of Laboratory Medicine in Disaster Management	<b>Dr. Sailesh Pradhan</b> Dr Sandipa Kunwar		Auditorium hall
12:30-13:30	<b>LUNCH</b>			<b>POSTER PRESENTATION</b>
13:30-14:30	<b>Panel Discussion</b>	<b>Topic: Prospect of Emergency Medicine and Challenges to establish a high functioning and Academic Emergency Department</b>	Chair: Dr. Bharat Yadav  Panelists: Faculties from: USA/ Malaysia/ India/ MoHP/KU/Others  Moderator: Dr Sandeep Sahu	Auditorium hall
14:30-16:30				

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	<b>Plenary Sessions</b>	<b>Presenters</b>	Chair: Dr. Samir Adhikari (MOHP) Co-Chair: Dr. Puspa Mani Kharal (GPEMAN)	
	<b>Experience sharing:</b> Disaster Response by Dhulikhel Hospital during earthquake and Lessons learned during COVID-19	<b>Dr. Rajeev Shrestha</b>  Video clip of Dhulikhel Hospital	Moderator: Dr. Rajkumar Dangal	
	Experience Sharing: USA	<b>Dr. Bonnie/ Dr. Sagar</b>		
	Experience sharing: Malaysia	<b>Dr. Alwi</b>		
	Experience sharing: India	<b>Dr. Sahu</b>		
	Experience sharing: HEOC, Nepal	<b>Dr. Samir Adhikari</b>		
Tea break				
<b>16:30- 17:30</b>	Meeting with General Practice and Emergency Medicine Association of Nepal (GPEMAN) President Dr. Pushpa Mani Kharal and executive members		GPEMAN/ all international guest faculty	

**1<sup>ST</sup> International Conference on Disaster Preparedness & Management**  
**World Academic Council of Emergency Medicine**  
**Table-Top exercise and Communication in Disaster Medicine**  
**(WACEM-TOPCOM NEPAL)**

Day 3: TOPCOM Conference December 3, Sunday			
Time	Topic	Facilitators	Remarks
07:45-08:00	Registration		<b>Auditorium Hall</b>
08:00-08:20	Role of Radio diagnosis in Disaster Management	Dr. Sumarga Simkhada	Chair: Dr. Alwi  Moderator: Dr. Anmol Purna Shrestha
08:20 -11:40 (Break: 10:30-10:40)	<b>DRILL PREPARATION</b>	Dr. Soghoian	Chair: Dr. Bonnie Co- Chair: Dr. Dipak Shrestha  Moderator: Dr. Shailesh Prasad Shrestha
	<b>MODEL CITY</b>	Dr. Pandya	
	<b>HVA</b>	Dr. Arquilla	
	<b>MOU (disaster plan)</b>	Dr. Alwi	
	<b>IRG (incident response guide)</b>	Dr. McMahon  Dr. Kharel  Dr. Shailesh Prasad Shrestha	
11:50-12:30	<b>Lunch</b>		<b>POSTER PRESENTATION</b>
12:30-14:30	Press Conference	Dr. Arquilla, Dr. Alwi Dr. Pandey, Dr. Rohit Shrestha	Moderator: Dr. Rajkumar Dangal
14:30-15:00	Closing Ceremony		



# DR. ABHILASH CHANDRA

## ASSOCIATE PROFESSOR



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### EXPERIENCE

Dr. Abhilash Chandra is an Associate Professor at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow.

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### QUALIFICATION

- DM, Nephrology

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### AREA OF INTEREST

- Intervention nephrology; Hypertension and Cardiovascular disease in ESRD.

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### PUBLICATION

45 International and National publications, several presentations in national and international conferences.

# DR. DAMIEN SANTER

## CONSULTANT




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### EXPERIENCE

Dr. Damien Santer is a consultant with excess of 25-years proven track record in strategy, risk, innovation, emerging technology, and general engineering, Damien is the Founder of the X3SI, offering austere and emergency medicine, pre-hospital medicine, and first aideducation, consultancy, and services to clients spanning 5 continents.

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### ACHIEVEMENTS

- Kosciuszko Holdings Sdn Bhd – Chairman
- MoneyMatch Sdn Bhd - Director
- X3SI Sdn Bhd – Managing Director & Paramedic
- Austere & Emergency Medicine International LLC – Curriculum Director
- Group Scout Leader for 2nd KL
- Training Advisor for British Scouting Overseas – Rest of World District
- Head of First Aid Training team for British Scouting Overseas
- District Explorer Scout Leader - Rest of World District

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### QUALIFICATIONS

- Diploma Paramedical Science (Australia)
- Advanced Cardiovascular Life Support (AHA)
- Certificate IV in Assessment & Workplace Training (2003)
- Emergency Medical Technician (University of Colorado)
- Psychological First Aid (Johns Hopkins University)
- Certificate III in Public Safety (NSW State Rescue Board Accredited Operator)
  - General Rescue
  - Search & Rescue
  - Vertical Rescue (Personal Mobility and Technical Systems)
  - Road Crash Rescue
  - Flood Boat Rescue
  - Storm Damage Operations
  - Advanced First Aid
  - Communications

# DR. DHARMENDRA URAIYA

PROFESSOR



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## EXPERIENCE

Prof. Dr. Dharmendra Uraiya holds the position of **Professor** in the Department of Medicine at the Hind Institute Of Medical Sciences, Barabanki

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## MEMBERSHIPS

- Life member API
- Life member IMA
- Life member SOAR
- Life member UPCSI

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## AREA OF INTEREST

- Diabetes management and prevention
- Critical care

**22 PUBLICATION IN NATIONAL AND INTERNATIONAL JOURNALS**

# DR. DIVYA SRIVASTAVA

ASSOCIATE PROFESSOR  
 MD, PDCC, FACEE




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## EXPERIENCE

Prof. Dr. Divya Srivastava holds the position of **Associate Professor** in the Department of Anesthesiology at the **Sanjay Gandhi Postgraduate Institute of Medical Sciences** in Lucknow, India.

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## ACHIEVEMENTS AND AWARDS

- Research Excellence Award 2022 by Institute of Scholars awarded in March 2023
- Dr KPR Young Anaesthesiologist Award 2021. By ISA Kerala
- Outstanding Clinician in Anaesthesiology 2018 by Venus International Foundation
- 31 International Publication
- Invited faculty in conferences/Cme last 5 years: 46

# DR. GURJEET SINGH

## EMERGENCY PHYSICIAN




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### EXPERIENCE

Dr. Gurjeet Singh is an Emergency Physician at Hospital Selayang, Selangor

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### ACHIEVEMENTS

- Hospital Ampang, Selangor — Houseman 2011- 2013
  - Hospital Duchess of Kent, Sandakan, Sabah — Medical Officer 2013 - 2015
  - Hospital Ampang, Selangor — Medical Officer Floating
  - Hospital Shah Alam, Selangor — Medical Officer 2015-2016
  - Hospital Universiti Sains Malaysia, Kelantan — Masters student 2016-2018
  - Hospital Sungai Buloh, Selangor — Masters student 2018-2020
  - Hospital Kuala Lumpur, K.L — Emergency Physician 2020=2021
  - Hospital Selayang, Selangor — Emergency Physician 2021-present
  - Hospital Sungai Buloh, Selangor — Clinical attachment trainee Emergency Trauma Care 2023
- 

### QUALIFICATIONS

- Melaka Manipal Medical College, India/Melaka — MBBS 2006-2011
- Universiti Sains Malaysia, Kelantan — Master of Medicine(Emergency Medicine)2016-2020
- Ministry of Health Malaysia, Hospital Sungai Buloh — Certificate of Completion attachment training Emergency Trauma Care Jan 2023 - March 2023
- TeleMedicine Clinic, online,Spain — Body Trauma CT Fellowship U.E.M.S. EACCME 2021
- TeleMedicine Clinic, online,Spain — Stroke Fellowship U.E.M.S. EACCME 2022
- The Ohio State University, United States — KySS Mental Health Fellowship (Online)2022
- London Academy of Sports and Health Sciences, online,London — Pain Fellowship International Association of Therapist (IAOTH) 2022

# NABIL MUHAMMAD AL KUDDOOS

## EMERGENCY MEDICINE PHYSICIAN



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### PROFILE

Dr Nabil is currently attached to the Emergency and Trauma Department, Hospital Selayang as an Emergency Medicine Physician since June 2021. He currently holds the position of Coordinator of Pre-Hospital Care and Ambulance Services Unit. His special interests are in Disaster Training, Emergency Critical Care & Ultrasonography. He is also a member of the Clinical Toxinology Special Interest Group (SIG).

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### AFFILIATION

Emergency & Trauma Department, Hospital Selayang  
Lebuhraya Selayang-Kepong, 68100 Batu Caves, Selangor

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### EDUCATION

- Emergency Medicine Specialist Jun 2021 - Present  
Hospital Selayang, Selangor
- Emergency Medicine Trainee 2015 - 2021  
HUKM, Kuala Lumpur
- Medical Officer 2011 - 2015  
Hospital Orang Asli Gombak (HOAG), Selangor
- House Officer 2009 - 2011  
Hospital Selayang, Selangor

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### Certificates

- Basic Life Support (BLS) Trainer
- Advanced Life Support (ALS) Trainer
- Paediatric Advanced Life Support (PALS)
- Advanced Trauma Life Support (ATLS)
- Basic Disaster Life Support (BDLS)
- Advanced Disaster Life Support (ADLS)
- Pre Hospital Trauma Life Support (PHTLS) Trainer
- Certified Medical Impairment Assessor (CMIA)

# DR MOHAMED ALWI BIN ABDUL RAHMAN

## ADJUNCT PROFESSOR



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### EXPERIENCE

Dr. Mohamed Alwi Bin Abdul Rahman holds the position of Adjunct Professor at MAHSA UNIVERSITY ,Malaysia. He was former Head of Department at Emergency and Trauma Department, Hospital Selayang.

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### QUALIFICATIONS

He is trained as Emergency Physician with subspeciality in Disaster Medicine . He had completed his training in Disaster Medicine in the UK, Pre-hospital Care in Canada and CBRNE training under the Canadian Government. He has completed his Fellowship In Disaster Medicine from USA.

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### ACHIEVEMENTS

- Advisor at Ministry of Health, Malaysia
- Chairman for the Ambulance Service and Disaster Management, Malayaian Red Crescent Society
- National Disaster Life Support Trainer
- Adjunct Professor in Many Universities of India, Indonesia, Malaysia
- Deputy Commander of National COVID-19 Response Task Force
- Given Talks in International Conference on Trauma and Disaster Medicine in South Asia Middle East and Europe

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### AREA OF INTEREST

- Global Humanitarian response works in natural disasters and civil conflicts
- Conducting Trauma, Disaster based trainings

# DR JAY PANDYA

## ASSISTANT INSTRUCTOR

UT Southwestern, Dallas, Texas




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### QUALIFICATIONS

- Medical education at The George Washington University
- Residency in emergency medicine at SUNY Downstate in New York
- Pursuing a fellowship in emergency disaster & global health at UT Southwestern in Dallas, Texas and
- Concurrently obtaining his master's degree in public health

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### ACTIVITIES

- Ultrasound education in Rwanda
- Several research studies regarding emergency medicine training program evaluations in India
- Worked clinically in refugee settlements in Lebanon
- Presented at international conferences in Malaysia on disaster public communication, de-escalation techniques, and active shooter response
- Worked with hospital and regional committees on training hospital and local emergency management staff on radiation response protocols, delivering active shooter and de-escalation training to emergency medicine residents, and updating hospital pediatric abduction policies

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### AREAS OF EXPERTISE

International Medicine, Emergency Medicine, International disaster preparedness, Post-disaster health systems strengthening and Inter-governmental collaborationh



# PROF. DR BONNIE ARQUILLA

PROFESSOR



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## EDUCATION

- Undergraduate: BA in Drama from the University of California at Irvine, 1975
- Post Baccalaureate: Columbia University/City College of New York 1986 – 1989
- Medical School D.O., NY College for Osteopathic Medicine, 1993

---

## PROFESSIONAL TRAINING

- Rotating Osteopathic Intern Methodist Hospital, 1993 - 1994
- Residency Emergency Medicine Lincoln Medical and Mental Health Center, 1994-1997

---

## ACADEMIC APPOINTMENTS

- Professor of Emergency Medicine 2009 –2022
- Professor Emeriti of Emergency Medicine SUNY Downstate Medical School 2022-Present
- Adjunct Professor Manipal Academy of Higher Education Kasturba Medical College Manipal India 2018-present
- Official Emergency Medicine written and oral boards review course-EMPACT India Course director 2014-2022

# DR. SAMARA SOGHOIAN

ASSISTANT PROFESSOR




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## EDUCATION

- Undergraduate: McGill University School of Medicine
- Residency: Emergency medicine at Kings County Hospital/SUNY Downstate in Brooklyn, New York
- Fellowship: Medical Toxicology at NYU and the New York City Poison Control Center
- Masters: in Medical Anthropology at McGill University

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## EMERGENCY MEDICAL SERVICES EXPERIENCE

- Assistant Professor in Emergency Medicine New York University (NYU) School of Medicine USA
- Physician at the Bellevue Hospital emergency department in New York City
- Faculty in the Medical Toxicology Fellowship at the New York City Poison Center
- Clinical Coordinator and the Lead Clinician for the Korle-Bu Teaching Hospital Department of Emergency Medicine from its inception in 2012 to 2019
- Co-Director of the annual “Dr. Sage and Dr. Sari CPC Competition” for INDUS-EM
- World Academic Council of Emergency Medicine, since 2007
- Physician liaison for the department of Emergency Medicine

# JONATHAN W. MCMAHON, D.O.




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## EDUCATION

- State University of New York (SUNY) Downstate Health Sciences University Brooklyn, NY Emergency Medicine & Internal Medicine Combined Residency Program Anticipated June 2024
- New York Institute of Technology College of Osteopathic Medicine (NYITCOM) Old Westbury, NY
- Doctor of Osteopathic Medicine May 2019
- Certificate in Global Health December 2016
- Binghamton University, State University of New York, Harpur College of Arts and Sciences Binghamton, NY

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## EMERGENCY MEDICAL SERVICES EXPERIENCE

- Fire Department of the City of New York (FDNY) Senior EMS Elective Brooklyn, NY
- Resident Observer June 2023
- Harpur's Ferry Student Volunteer Ambulance Service, Ltd. Binghamton, NY
- Ambulance Driver, Driver Preceptor, Aide (Volunteer) September 2011 – Present
- Medic, Field Training Preceptor (Volunteer) September 2011 – June 2016
- 2nd Assistant Chief & Operations Director May 2013 – May 2014
- Member at Large, Member of Board of Directors May 2012 – May 2013
- North Babylon Volunteer Fire Company North Babylon, NY
- Interior Firefighter, EMT-Basic (Volunteer) May 2011 – April 2016
- Robert Moses State Park, New York State Department of Parks and Historic Preservation West Islip, NY
- Emergency Medical Technician May – August 2015
- Susquehanna Regional EMS Council, Inc. Binghamton, NY
- Naloxone Training Coordinator January – May 2015
- Superior Ambulance Service, Inc. Binghamton, NY
- AEMT-Critical Care Medic, Driver June 2013 – January 2015

# DR. NISHANT RAJ PANDEY



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## EXPERIENCE

- Physician Informaticist Wellstar Health System
- Physician Informaticist- Senior Health Informatics Methodist Health system Nov 2014 to March 2022
- Adjunct Instructor Bryant & Stratton College – Online April 2020 to present
- Emergency Physician- Chair Mar 2014- Oct 2014

Model Hospital Department of Emergency Medicine

- Physician Informatics Sep 2009- Sep 2014

Napochi LLC, Birmingham, Alabama.

- ED Physician Aug 2013- May 2014

Grande International Hospital Department of Emergency Medicine

- Residency Sept 2010-July 2013

Tianjin Medical University

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## QUALIFICATION

- MBBS (KGMC, Lucknow, India), MD (Anaesthesiology)(MLBMC, Jhansi, UP, India)
- DNB NBE, India
- PDCC (Neuro-Anaesthesiology), SGPGIMS, Lucknow, India
- CCPPM & CCEPC (Pain and Palliative Medicine),
- MAMS (Anaesthesiology and Critical Care Medicine), Member -NAMS-India
- FACEE (Fellow of Emergency Medicine) from Academic college of Emergency Expert in India
- FICCM (Fellow of Indian College of Critical Care Medicine), ISCCM
- FICA (Fellow of Indian College of Anaesthesiology)
- ICMR-International Fellow (Trauma & Emergency Medicine), USA
- Professor, Department of Anesthesiology & Ex- Additional Professor, Department of Emergency Medicine, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow-226014, UP, India

# DR RAMU KHAREL

## ASSISTANT PROFESSOR

ALPERT MEDICAL SCHOOL, BROWN UNIVERSITY



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### QUALIFICATIONS

- Medical Doctorate from UT Southwestern in Dallas
- Masters of Public Health from the T.H. Chan School of Public Health at Harvard University
- Specialty training in Emergency Medicine at Emory University in Atlanta
- Focused sub-specialty training in Global Emergency Medicine research and Clinical Tropical Medicine and Hygiene

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### ACTIVITIES

- Founder of a grassroots NGO in Nepal called HAPSA Nepal and has worked extensively in earthquake response and COVID-19 response in Nepal
- Starting the first institutional based poison information center in Nepal and improving rural trauma care in Achham, Nepal

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### AREAS OF EXPERTISE

International Medicine, Emergency Medicine, Global Health Security, Injury Sciences, Global Health Research

# DR. RUCHI VERMA

## ASSOCIATE PROFESSOR



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### EXPERIENCE

Dr. Ruchi Verma holds the position of **Associate Professor** in the **Department of Anesthesiology** at the **Sanjay Gandhi Postgraduate Institute of Medical Sciences** in Lucknow, India.

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### ACHIEVEMENTS

- 24 publications in National and International Journals
- Outstanding Woman Researcher award 2021 by Venus International Foundation
- Invited faculty in conferences/Cme last 5 years: 32
- AHA certified BLS/ACLS Instructor

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### MEMBERSHIPS

- Life member ISA
- Life Member ISNACC
- Life Member NCSI
- Life Member IMA
- Life Member ISCCM
- Life Member ISICPM

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### AREA OF INTEREST

- Neuro-anaesthesia and Neurocritical Care
- Cardiopulmonary resuscitation

# PROF.DR.SANDEEP SAHU

## PROFESSOR




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### EXPERIENCE

Prof. Dr. Sandeep Sahu holds the position of **Professor** in the **Department of Anesthesiology** at the **Sanjay Gandhi Postgraduate Institute of Medical Sciences** in Lucknow, India.

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### QUALIFICATION

- MBBS (KGMC, Lucknow, India), MD (Anaesthesiology)(MLBMC, Jhansi, UP, India)
- DNB NBE, India
- PDCC (Neuro-Anaesthesiology), SGPGIMS, Lucknow, India
- CCPPM & CCEPC (Pain and Palliative Medicine),
- MAMS (Anaesthesiology and Critical Care Medicine), Member -NAMS-India
- FACEE (Fellow of Emergency Medicine) from Academic college of Emergency Expert in India
- FICCM (Fellow of Indian College of Critical Care Medicine), ISCCM
- FICA (Fellow of Indian College of Anaesthesiology)
- ICMR-International Fellow (Trauma & Emergency Medicine), USA
- Professor, Department of Anesthesiology & Ex- Additional Professor, Department of Emergency Medicine, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow-226014, UP, India

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### ACHIEVEMENTS

- Fellow in Critical Care Medicine (FICCM) of ICCM, ISCCM
- Fellow in Emergency Medicine (FACEE) of ACEE-India from Academic college of Emergency Expert in India
- Fellow of Indian College of Anesthesiologists (FICA)
- ICMR International Fellow in Trauma and Emergency Medicine
- Postgraduate Teaching and research experience: 18 years
- Anesthesia Examiner of MD, DNB, DA of various University and NBE
- Examiner of Various University & medical colleges in India
- Total Publications: 90
- Book chapters: Twenty in various books
- Journal publications: 70
- Awards: 20 National and International awards recipient
- Travel grant awards 16 (ICMR, DST, CSIR, IAHPC, IASP, WFSA, EMSSA, S. Korea, Israel)
- Editorial Board member (IJA, JOACP, JETS, Indian Anaesthetist Forum etc), list enclosed
- Journal Reviewer: Prestigious International and National Journals
- Research Project done: more than twelve
- Thesis Research project: more than twenty
- International Instructor of skill course: ACLS, ATLS, FCCS, TEE, USG and POCUS, Airway courses
- Presented Papers; around 35 in various International and national conferences

# DR TEJ PRAKASH SINHA

ADDITIONAL PROFESSOR




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## EXPERIENCE

Dr. Tej Prakash Sinha holds the position of **Additional Professor** in the **Department of Emergency Medicine** at the **JPN Apex Trauma Centre, All India Institute of Medical Sciences, New Delhi.**

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## ACHIEVEMENTS

- Co-Chair Education Subcommittee, EMERGE, Global Network
- Co-Director WHO Collaborating Center for Emergency & Trauma Care, South East Asia Region
- Secretary International network for Critical Ultrasound (INCUS)
- National Expert for Emergency & Trauma care Policy- NITI & Ministry of Health, Govt. of India

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## AREA OF INTEREST

Emergency & Trauma care system building including Training & Research



# **A Multidisciplinary Approach to Managing Vascular Injury in a Trauma Patient: A Case Report**

Acharya S., Acharya P., Chaudhary A.

Kathmandu University School of Medical Sciences, Dhulikhel, Kavre

## **Introduction:**

Vascular injuries resulting from trauma pose a significant challenge in emergency medical settings. This case report explores the multidisciplinary approach adopted in addressing a complex scenario of Grade III C right intra-articular proximal tibial and fibula fracture with associated vascular compromise.

## **Case Presentation:**

A 33-year-old male patient presented with active bleeding from wounds over the right proximal leg following a road traffic accident. Despite a visible deformity and decreased sensation in the foot, the patient maintained consciousness. Initial assessments revealed non-palpable arterial pulses and an ultrasound screening confirmed a Gustilo Grade III C injury with subintimal thrombus in the popliteal artery.

The case necessitated an immediate and comprehensive intervention. Hence a multidisciplinary team collaborated, including emergency physician, orthopedic surgeons, vascular surgeons, and anesthesiologists to address both the musculoskeletal and vascular aspects of the injury with thrombectomy and a polytetrafluoroethylene (PTFE) graft. The choice of PTFE graft and fasciotomy played a crucial role in restoring blood flow and preventing compartment syndrome.

## **Discussion:**

Gustilo-Anderson type IIIC open fractures remain an indubitable challenge, even for surgeons with greater experience, because of neurovascular damages, high amputation rate, and vast soft tissue injuries. It usually requires immediate resuscitation of the patient, emergency debridement, fracture fixation, limb stabilization, and restoration of vascular flow. There have been controversies in the past between amputation and salvage of the lower limb during the management of patients with an open fracture and an associated vascular injury (Gustilo type IIIC) due to unjustifiable increase in cost and emotional burden for the patient. However, in the past two decades, studies have suggested that salvaged limbs have better quality of life and impose lower costs on healthcare systems due to advanced emergency care and recent advancement in microvascular and flap reconstruction surgery. Hence emergency interventions and comprehensive care is of utmost importance in managing these patients.

## **Conclusion:**

This case highlights the importance of a multidisciplinary approach in managing trauma patients with concurrent vascular injuries and complex fractures. The successful outcome highlights the significance of prompt diagnosis, coordinated surgical interventions, and ongoing collaboration among specialists.

**Keywords:** Fasciotomy, Flap reconstruction surgery, Gustillo injury, Vascular injury,

# **Hypokalemic asystole in dengue fever: an unusual manifestation - a case report**

Chaudhary A., Sapkota P., Dhakal K.  
Kathmandu University School of Medical Sciences, Dhulikhel, Nepal

## **Introduction:**

Dengue fever is an Aedes mosquito-borne viral illness prevalent in tropical and subtropical areas like Nepal. Presentation of dengue can vary from mild flu-like viral fever to multiorgan failure with shock. Severe hypokalemia with cardiac asystole can be a rare manifestation of dengue fever.

## **Case Presentation:**

We present a case of a 26-year-old male previously healthy male who presented with high-grade fever associated with chills, rigors, and sweating. During the course of the treatment, the patient's clinical course deteriorated leading to sudden unexpected cardiac arrest. The patient was given 5 cycles of Cardiopulmonary Resuscitation and return of spontaneous circulation (ROSC) was achieved. The baseline workup done showed serum potassium of 1.4 mEq/L. The patient was kept in intensive medical care and potassium repletion was done

## **Discussion:**

Severe hypokalemia leading to cardiac asystole is a rare and potentially life-threatening complication of dengue fever. This case emphasizes the importance of considering unusual presentations in patients with dengue, as well as the need for early recognition and appropriate management of severe electrolyte imbalances. Timely interventions, such as CPR and potassium replacement, played a pivotal role in this patient's survival. Further research is warranted to better understand the pathophysiology of such atypical dengue manifestations and to develop effective treatment guidelines.

## **Conclusion:**

This case report highlights the unusual and life-threatening presentation of profound hypokalemia leading to cardiac asystole in a previously healthy individual with severe dengue fever. Healthcare providers should remain vigilant for such rare complications and be prepared to initiate immediate life-saving measures when necessary. Early recognition and prompt intervention are critical in improving outcomes for these patients.

**Keywords:** Asystole, Dengue, Hypokalemia

# Reliability and Validity of Nepalese Language Version of Fear of COVID-19 Scale

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## Introduction:

The Fear of COVID-19 Scale (FCV-19S) is a valid and reliable screening tool to assess the fear of COVID-19 in the general population, which was widely used during COVID-19 pandemic.. It has been translated into various languages; however, FCV-19S has not been translated and validated in the Nepalese language yet.

## Objective:

To develop a Nepalese version of FCV-19S with acceptable reliability and validity for use among the Nepalese population.

## Method:

The original English version was translated into Nepalese using a forward-backward translation protocol. The translated scale was pre-tested in ten samples and then administered to the sample population through an online Google form. The study enrolled 106 of the adult general population from August to September 2021. Reliability and validity were tested measuring the internal consistency (Cronbach's alpha) and correlations, respectively. Descriptive statistics were used to examine the demography of participants. The data were analyzed using SPSS-26. We aimed for correlations of  $\geq 0.40$ .

## Results:

The mean age of the participants (n = 106) was 32.3 years (SD  $\pm$  11.3), and 56.6% were males.

The majority of participants had an educational background of bachelor's and above (77.4%). The translated version was found to be reliable with adequate internal consistency (Cronbach's alpha=0.85), and acceptable correlation (Pearson correlation  $\geq 0.65$  significant at 0.01).

## Conclusion:

The Nepalese version of Fear of COVID-19 Scale (FCV-19S) was found to be reliable and valid.

**Keywords:** COVID-19 scale, Fear, Psychiatry

# Approach to Polytrauma: Implementation of Early Total Care

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## Introduction:

Damage control orthopedics (DCO) prioritizes initial stabilization in managing severe musculoskeletal injuries, offering life-saving measures before definitive fixation while early total care (ETC) involves the definitive fixation of all injuries in a single surgical setting. ETC requires a delicate balance among the treatment teams like emergency physicians, surgeons, and anesthesiologists because the definitive care surgery and resuscitation go simultaneously.

## Case Presentation:

The case report presents a case of a 27-year-old male involved in a road traffic accident under the influence of alcohol, presenting with multiple fractures. An interdisciplinary team opted for ETC after initial resuscitation. The patient's resuscitation and subsequent treatment were performed by a team of emergency physicians, surgeons, and anesthesiologists. The successful application of ETC, involving dynamic hip screw, interlocking nailing, Ilizarov fixation, and pinning, resulted in an uneventful intraoperative and postoperative course.

## Discussion:

Early and prompt resuscitation is a cornerstone in managing polytrauma patients, addressing immediate life-threatening conditions, and preventing secondary injuries. Efficient communication among emergency services, trauma teams, and specialists is essential for rapid assessment, diagnosis, and intervention. In polytrauma patients, a balanced approach, considering both DCO and ETC principles tailored to the patient's condition, is pivotal for optimizing outcomes in severe musculoskeletal trauma. In stable patients, DCO's staged approach may lead to prolonged hospitalization and complications like infection, muscle contractures, and joint stiffness. ETC, advocating for immediate comprehensive fixation, streamlines treatment but poses potential risks in physiologically unstable patients. Balancing the advantages and drawbacks of each approach is crucial for optimizing outcomes in severe musculoskeletal trauma.

## Conclusion:

This case demonstrates successful early total care application in a stable polytrauma patient, emphasizing the importance of immediate good resuscitation followed by comprehensive surgical management. It demonstrates early total care's feasibility in managing complex orthopedic injuries, contributing valuable insights to the ongoing debate about damage control surgery and early total care in the scenario of polytrauma.

**Keywords:** Damage Control Orthopedics, Early Total Care, Polytrauma

# **Rhabdomyolysis induced acute kidney injury requiring dialysis in a 12 year old child**

Shrestha S.<sup>1</sup>, Yadav A.K.<sup>1</sup>, Shrestha A.B.<sup>2</sup>, Khatroth S.<sup>3</sup>, Yadav B.<sup>1</sup>

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## **Introduction:**

Rhabdomyolysis is a syndrome occurring due to extravasation of myocyte intracellular proteins like creatinine kinase and electrolytes into the bloodstream characterized by clinical symptoms of muscle pain, weakness, stiffness, tenderness, cramps and dark colored urine. It occurs due to ischaemic injury to cells and is more common in boys.

## **Case presentation:**

A 12 year old boy with a history of physical abuse and exertion due to swimming, presented to the emergency department with symptoms of fever, unconsciousness and acute respiratory symptoms. The initial diagnosis pointed towards respiratory tract infection and was treated accordingly. Chest X ray showed mild pleural effusion, serum creatinine, urea , LDH , ALT and total WBC counts were elevated. With laboratory parameters like elevated serum creatinine, serum creatinine phosphokinase and elevated serum urea, rhabdomyolysis induced AKI was diagnosed. Finally, two rounds of hemodialysis were done after which patient showed improvement.

## **Clinical Discussion:**

Though the exact incidence is unknown, study has reported an incidence of four cases of rhabdomyolysis per 1,500 pediatric neurology over a three year period. In rhabdomyolysis, there is elevated level of intracellular contents in serum like creatinine kinase which affects different organs causing fever, myalgia, muscle weakness and even life threatening conditions like acute renal failure, cardiac arrhythmia, DIC causing death in nearly eight % of cases. Serum CK is the most sensitive serum marker for muscle breakdown, and its elevation is used for diagnosis. IV fluids and electrolyte correction is the baseline for treatment. Dialysis should be initiated in children at an estimated glomerular filtration rate (eGFR) of <10 ml/min/1.73 m<sup>2</sup> or chronic kidney disease (CKD) with uremic symptoms refractory to medication and/or dietary management.

## **Conclusion:**

Rhabdomyolysis is an overlooked condition and it's diagnosis still remains a challenge. Early diagnosis and treatment decreases the risk of complications.

**Keywords:** Child, Dialysis, Rhabdomyolysis

# Clinical profile of ocular trauma presenting to Dhulikhel Hospital

**Author:** Keshari R., Shrestha J.K., Shrestha P.

Department of Ophthalmology, Dhulikhel hospital, Kavre

## **Introduction:**

Ocular trauma is an important cause of monocular blindness in developing countries. The purpose of the study was to determine the clinico-demographic profile, agent causing ocular trauma, the interval between time of injury and time of presentation to the hospital and classify ocular injuries of the patient presenting with ocular trauma at Dhulikhel hospital.

## **Method:**

A cross-sectional study was conducted at the emergency and outpatient department (OPD) of Ophthalmology of Dhulikhel hospital for October 2021 to September 2022. All cases of ocular trauma irrespective of their age, mode of injury, time since injury and presenting visual acuity were included in the study. A detailed history and clinical evaluation and necessary intervention were carried out.

## **Result:**

The study comprised of 380 individuals (397 eyes). The ocular trauma was more prevalent in the age group ranging 21-50years comprising 64.7%. The ocular trauma was higher in males (65.8%) than in females (34.2%). Most of the patients were farmers (26.1%). Out of 380 patients, 204 (53.7%) were from Kavrepalanchowk district. Most of the patient sustained trauma at workplace. One hundred and thirty-five (35.5%) were work related injuries. The most frequent traumatic agents were stone/ concrete (30.52%) followed by metallic objects (20.0%). Two hundred and fifty-nine (63.7%) Patients presented to the hospital within 24 hours. Right eye (59.5%) was predominantly involved. Out of 397 injured eye, 68.01% eyes had closed globe injury, 1.25% eyes had open globe injury while 30.73% had trauma restricted only to eyelids.

## **Conclusion:**

Closed globe injuries were the commonest ocular injury. Young adult males were more vulnerable to ocular trauma. Workplace trauma was the commonest cause of trauma followed by road traffic accidents (RTA).

**Keywords:** Closed globe injury, Ocular trauma, Open globe injury, Workplace injury.

# Angioedema/anaphylaxis: Adverse Drug Reaction secondary to piperacillin-tazobactam- A Case report

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<sup>6</sup> Department of Dermatology, Dhulikhel Hospital

## Introduction:

Angioedema is a reaction to a trigger that causes swelling in dermis or the layer below a mucous membrane. It can affect any part of the body, but swelling usually affects the eyes, lips, genitals, and limbs. Among the four types of angioedema, drug induced angioedema is an allergic reaction secondary to drugs. It becomes life-threatening when it involves the larynx.

## Case Presentation:

A case of 93 years old female admitted under medicine unit with diagnosis of AE of COPD with right lower zone pneumonia with Type 2 respiratory failure. Patient developed angioedema 3 hours after the first dose of Piperacillin-Tazobactam. Patient was given injection pheniramine, adrenaline and hydrocortisone and the case was reported to the Pharmacovigilance unit.

She was shifted to adult intensive care unit (AICU). Piperacillin-tazobactam was discontinued. The adverse drug reaction (ADR) deteriorated to anaphylaxis so reviewed by dermatology and prescribed pheniramine and hydrocortisone. After a week of ventilator support, VAP due to *klebsiella pneumoniae* was isolated in her tracheal aspirate sensitive to colistin, imipenem, meropenem and piperacillin-tazobactam. The pharmacovigilance unit suggested for skin prick test for cilastin-imipenem which was negative and was thus used. Drug allergy card was issued by PV unit and patient caretaker was counselled.

## Discussion:

Anaphylaxis secondary to piperacillin is a rare and potentially life-threatening ADR. This case tried to demonstrate an additional example of the lack of cross reactivity between Piperacillin and other beta-lactam antibiotics. Previous studies have demonstrated that the immune response is directed at the unique side chain of the Piperacillin. After having an allergic reaction to Piperacillin-Tazobactam, it is important that patients are tested for a type-1 IgE-mediated reaction to other penicillins even though only 33% of individuals were found to have a cross sensitivity to other Penicillin after a Type-1 IgE-mediated reaction to Piperacillin-Tazobactam

## Conclusion:

This report highlights the importance of ADR reporting and multi-dimensional teamwork to manage such life-threatening ADR. Drug history plays the critical role for prevention of such ADR.

**Keywords:** Anaphylaxis, Angioedema, ADR(Adverse Drug Reaction), Hypersensitivity, Pharmacovigilance

# Compartment Syndrome of Upper Limb Secondary to Snake Bite

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## Introduction:

Snake bites pose a significant common public health concern, with more prevalence in rural areas. Compartment syndrome (CS) is one of the rare and severe manifestations of snake bite wherein venom-induced swelling within a closed anatomical compartment leads to increased pressure which may result in ischemic damage to nerves and muscle. Anti-snake venom and prompt fasciotomy is recommended for management of CS secondary to snake bite.

## Case details:

Here we report a case of a young female with Green Pit Viper bite on the left hand who developed compartment syndrome of hand, forearm, and arm. The affected limb was splinted but a tourniquet was not applied before arriving at hospital. Upon arrival, initial resuscitation measures were initiated maintaining airway, breathing, and circulation (ABC).

During evaluation, there was severe pain on passive stretch along with paraesthesia, pallor, paralysis, and pulselessness. Prothrombin time was elevated at the time of presentation. Anti-snake venom (ASV) administration along with fasciotomy of all three compartments was done. The prompt intervention resulted in notable alleviation of pain and swelling. The postoperative course was uneventful. Blood transfusions were required during the hospital stay. After continued care of the wound and intensive physiotherapy, functional limb could be achieved.

## Discussion:

Snakebite envenomation is one of the biggest hidden health crises with a high incidence of incidence of 251 per 100,000 and case fatality rate of 7.8% in the Terai region of Nepal. As in the case of our patient, snake bites commonly affect the limbs, with the upper extremities accounting for around two third of all cases. True compartment syndrome must be differentiated from acute swelling, which sometimes may be difficult. Surgical decompression is indicated if there is presence of classical symptoms and signs of compartment syndrome.

## Conclusion:

The clinician must always evaluate a patient of snake bite envenomation for compartment syndrome apart from appropriately treating medically with ASV. Multidisciplinary and prompt management with initial resuscitation, anti-snake venom administration, fasciotomy and rehabilitative measures can save both life and limb in such cases.

**Key words:** Compartment Syndrome, Fasciotomy, Snake bite



# Acute presentation of Chronic Aortic Dissection

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## Introduction:

Chronic aortic dissection is a rare variant of aortic dissection where dissection in a weakened aortic wall and subsequent blood flow occur over a period of 3 months or more. Due to the lack of knowledge of underlying mechanism of the disease and the overall rarity of aortic dissection, literature published on the topic is lacking.

## Case Details:

An 83-year-old woman presented to the emergency department of Dhulikhel Hospital with gradually increasing shortness of breath over 5 days and an intermittent cough for 4 days. She also had high grade fever, chest pain, and decreased appetite over the past few days. On examination, there was bilateral non tender pitting pedal edema with no overlying skin changes. A chest examination revealed wheeze and crepitations. A provisional diagnosis of Cor Pulmonale was made, and she was managed accordingly.

USG of the abdomen was performed because of tenderness in the right hypochondrium which incidentally revealed an aortic aneurysm with features of aortic dissection and a Multi Detector CT angiogram of aorta showed involvement of the ascending aorta, descending thoracic aorta (Aneurysmal dilatation measuring 3.36cm) and suprarenal part of abdominal aorta(aneurysmal dilatation measuring 3.20 cm) with a mural thrombosis in the false lumen. A double lumen aortic dissection which was Stanford type A, DeBakey type I and an eccentric filling defect within the left main pulmonary artery and its lower segmental branch suggesting embolism were also noted as findings. A flap measuring 0.51 cm, pericardial effusion and pleural effusion were noted.

Symptomatic management was done with iv fluids and analgesics. No active interventions were made for aortic dissection credit to asymptomatic state for aortic dissection and old age of the patient but is under active follow up.

## Discussion:

Among the survivors of acute dissection/aneurysms people in their 6th and 7th decade and having a history of familial disease, dyslipidemia, arterial hypertension, and aortic surgeries seem to be at higher risk of chronic dissection. CT scan is the most reliable investigation. Intimal tears and flaps showing flow in the false lumen and calcification of the aortic wall are some positive radiological findings. Thrombus formation with subsequent embolization, secondary aneurysms and rupture, end organ malperfusion and pericardial tamponade are some of the dreaded complications.

## Conclusions:

Chronic Aortic dissection is a rare and complicated entity, and its acute presentation is even rare. Timely diagnosis and interventions such as aortic repair and/ or active surveillance are essential for a positive outcome. In this case the management was done conservatively.

**Keywords:** Aortic Aneurysm, Aortic dissection, CT Angiogram

# CUCURBITACIN TOXICITY

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## **Introduction:**

We present the case of a middle-aged man who presented to the Emergency Department with gastrointestinal bleed and hypovolemic shock, following consumption of bitter bottle gourd juice. It is important for an emergency physician to know about the potential toxicity of bottle gourd and to identify its presentation for timely treatment and prevention of life-threatening complications.

## **Case Details:**

A 39 year old gentleman, presented to the emergency department, with complaints of multiple episodes of vomiting, hematemesis, bloody diarrhoea and hypovolemic shock following intake of 200 ml of bitter bottle gourd juice. He was aggressively resuscitated with intravenous crystalloids, proton pump inhibitors, antiemetics and parenteral antibiotics. The patient was symptomatically improved with treatment. He underwent an upper gastrointestinal endoscopy which revealed esophagitis, diffuse hyperemia and erosions in the stomach and scalloped duodenum. Patient was discharged after 84 hours.

## **Discussion:**

Bottle gourd (*Lagenaria siceraria*) is a vegetable of the Cucurbitaceae family, which is widely used as a food and sometimes consumed as juice for its health benefits as mentioned by traditional medicine healers. Bottle gourd is also known as calabash/ *Lauki/ Ghia*. Cucurbitacin is the toxic substance which causes acute hemorrhagic gastroenteritis. Cucurbitacins are a group of bitter tasting tetracyclic triterpenoid plant substances which contain  $\beta$ - glucosides. There is no specific antidote. The treatment is symptomatic with aggressive fluid resuscitation and proton pump inhibitors.

## **Conclusion:**

Bottle gourd is a commonly consumed vegetable and hence there is a possibility of such potential cases of toxicity. Hence creating awareness among public and regarding the clinical presentation of bottle gourd toxicity among clinicians is very important to prevent fatal complications

## **Clinical Significance:**

We must recognise this toxicity timely with proper history and aggressively treat it to prevent the life threatening complications like acute kidney injury, acute liver failure, gastric necrosis, gastric perforation and even death. We should also create awareness among patients. "Prevention is better than cure."

**Keywords:** Bottle gourd, Cucurbitacin, gastroenteritis, hematemesis, hypovolemia

# **Challenges and barriers to implementing the WHO Trauma Care Checklist in an emergency department in Nepal: the need for Transformational Leadership**

Pokhrel M.

## **Introduction:**

The purpose of this paper is to report on the implementation of the World Health Organization (WHO) trauma care checklist (TCC) (WHO, 2016) in an emergency department in a tertiary hospital in Nepal. This research was undertaken as part of a Hybrid International Emergency Medicine Fellowship programme across UK and Nepal. The WHO TCC can improve outcomes for trauma patients; however, significant barriers affect its implementation worldwide. This article reports on the implementation, barriers and recommendations of WHO TCC implementation in the context of Nepal and argues for Transformational Leadership (TL) to support its implementation.

## **Methods:**

Explanatory mixed methods research comprising quasi-experimental research and a qualitative online survey, were selected methods for this research. A training module was designed and implemented for 10 doctors and 15 nurses from a total of 76 (33%) of clinicians to aid in the introduction of the WHO TCC in an emergency department in a hospital in Nepal. The research involved a pre- and post-training survey. Post-training, 219 patients were reviewed after four weeks to identify if process measures had improved the quality of care to trauma patients. Subsequently six months later, a qualitative online survey was sent to all clinical staff in the department to identify barriers to implementation, with a response rate of 26 (34%) (20 doctors and 6 nurses). Descriptive statistics were used to evaluate quantitative data and the qualitative data were analysed using the five stepped approach of thematic analysis.

## **Results:**

The evaluation of the implementation of the WHO TCC showed an improvement in care for trauma patients in an emergency setting in a tertiary hospital in Nepal. There were improvements in the documentation in trauma management, showing the training had a direct impact on the quality of care of trauma patients. The quality of documentation for trauma patients improved from the baseline of 56%, to 78%. The 10 doctors and 15 nurses in the Emergency Department (ED) all improved their baseline knowledge from 72.2% to 87% (p 0.00006), by 14.8% and 67% to 85% (p 0.006), respectively.

## **Conclusion:**

The qualitative data reported barriers, such as the busyness of the department, with residents and medical officers, suggesting a shortened version of the checklist to support greater protocol compliance. Embedding this research within TL provided a steer for successful innovation and change.

**Keywords:** Barriers, Doctors, Emergency medicine, Nurses, Trauma centre, Transformational leadership(TL), WHO trauma checklist

# **Correlation between transcranial ultrasound & computerized tomography scan to detect clinically significant condition in post-craniectomy patients.**

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## **Introduction:**

This study aims to detect clinically significant conditions because of which post-decompressive craniectomy patients come to the emergency department & require a CT head for evaluation.

## **Methods:**

This was a prospective, single-centered, cross-sectional observation study. We measured midline shift (if present), mass lesion (if any) & diameter of bilateral lateral ventricles in CT scan. Later, transcranial ultrasound was done, and all the measurements were taken. The associations between transcranial ultrasound and CT scan for detecting & identification of mass lesions were analyzed using Cohen's K-coefficient and a Bland-Altman plot.

## **Results:**

The measurements of the right and left lateral ventricles were (17.4±13.8) mm and (17.8±14.4) mm by CT head and (17.1±14.8) mm and (17.1±14.2) mm by Transcranial ultrasound (TCS) respectively (p = 0.720). Seven patients had midline shift detected by CT head and 6 by TCS. TCS was able to detect mass lesions in 15 patients and by gold standard method a total of 18 patients had mass lesions. Cohen's K-coefficient value was 0.84 (95% CI (0.72-0.89)) (p = 0.001). The level of agreement was 93.75%.

## **Conclusion:**

Point of care ultrasound can be used for transcranial ultrasound as a supplement to CT head in post-decompressive craniectomy patients. Assessment of the ventricular system (pre/post-EVD insertion), monitoring of regression/progression of mass lesion, can be done with TCS. Repeated scans are possible in less time which can decrease the frequency of CT head.

**Keywords:** Craniectomy, CT head, Transcranial Ultrasound, Ventricular system

# STELLATE GANGLION BLOCK IN TREATING ELECTRICAL STORM

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## **Introduction:**

Electrical storm refers to a state of cardiac electrical instability characterized by multiple episodes of ventricular tachycardia (VT storm) or ventricular fibrillation (VF storm) within a relatively short period of time, typically 24 hours.

## **Case details:**

A 48 year old gentleman known case of Diabetes mellitus, hypertension, coronary artery disease, post stenting to LCx, with an ejection fraction of 20% presented to Emergency department with complaints of palpitations and diaphoresis. His initial ECG showed monomorphic VT and patient was hemodynamically stable. Hence pharmacological cardioversion was attempted with Amiodarone. During course of treatment patient became hemodynamically unstable with hypotension and synchronised cardioversion was done, following which rhythm did not revert. His VT persisted, despite multiple cardioversion attempts, other anti arrhythmics were also added like lidocaine and esmolol. In between patient sustained one cardiac arrest, revived after two cycles of CPR and was intubated and put on mechanical ventilation . Finally left stellate ganglion block was given with 10% Lidocaine and the VT storm subsided. Patient was admitted to CCU, was discharged after inserting an ICD in a hemodynamically and neurologically intact state.

The same patient presented to us 7 months later with history of multiple ICD shocks and again ECG was suggestive of VT storm. Initially as patient was stable, we started with Amiodarone and later due to hypotension patient was given synchronised cardioversion. Eventually when all pharmacological and multiple electrical cardioversion failed, left stellate ganglion block was given and the storm settled.

## **Discussion:**

Stellate ganglion block ( SGB ) is extensively used by pain physicians for treatment of sympathetic mediated pain (SMP) that consists abnormal interconnection between sympathetic and sensory nervous system. The therapeutic effects of SGB are due to sympatholytic in its region of innervation, hence temporarily curbs the effect of sympathetic autonomic nervous system and the improvement of blood supply of the region. The common indications are complex regional pain syndrome of upper extremities , peripheral vascular disease, scleroderma and Raynaud's disease, post-surgical pain, post-traumatic stress disorder, intractable angina, and refractory ventricular arrhythmias. The ultrasound guided technique of SGB is now standard of care,the technique requires skill of ultrasound along with skill of needle tracking and neck anatomy.

**Keywords:** Electrical storm, stellate ganglion block, VT storm

# **Open fractures presenting to a tertiary care hospital in Nepal: A descriptive cross sectional study**

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## **Introduction:**

Open fractures pose significant challenges in orthopedic emergencies, necessitating prompt resuscitation and stabilization. This retrospective descriptive cross-sectional study, conducted at Dhulikhel Hospital, aimed to delineate the demographic characteristics, management patterns, and temporal distribution of open fracture cases between January 2021 and November 2023.

## **Methods:**

Data from the emergency department's records were analyzed for patients with open fractures who underwent immediate orthopedic interventions. Exclusions comprised closed fractures and non-trauma-related orthopedic presentations. Descriptive statistics were employed for analysis, presented through tables and charts.

## **Results:**

The study encompassed 131 cases of open fractures managed during the study period. Males constituted 103 cases, females 28, with a mean age of 36.01 years and standard deviation of 15.30. The analysis detailed yearly, monthly, and day-wise presentations, suggesting fluctuations in incidences across different periods of time. Seasonal or day-wise variations in presentation were observed, indicating potential trends. Gustilo classification was used to classify the severity of open fractures which showed the most common type to be G IIIB. The leg was the most commonly involved anatomical site. Spinal anesthesia was the most commonly form of anesthesia administered. Some commonly performed primary surgeries were outlined, showcasing the diverse spectrum of management strategies employed among which stabilization with external fixators was the most common method employed in this institution.

## **Conclusion:**

This study underscores the urgency and complexity of managing open fractures. The observed trends align with established literature, emphasizing the need for standardized protocols in such orthopedic emergencies.

**Keywords:** Emergency Room, Open Fractures, Orthopedic Emergencies, Resuscitation, Traumatology

# **Socio Demographic profiling of victims of sexual offense in Kavrepalanchowk District of Nepal examined at a Tertiary Care Center**

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## **Introduction:**

Sexual offence is an umbrella term referring to a classification of sexual acts and experiences that are imposed, pressured, coerced onto a person. The latest information from women children and senior citizen survey center of Nepal stated that about 2321 rape cases were recorded in the fiscal year 2077 to 2078.

## **Objectives:**

This study is aimed to highlight important findings within the data that could guide ongoing and future sexual assault prevention.

## **Methodology:**

A descriptive cross-sectional study of the victims of sexual offenses presented to Dhulikhel hospital between January 2019 and July 2023.

## **Results:**

Out of 136 victims, most of the age group affected was birth to 20 years (71.32%) ranging to 60-80 years with 1.47%. The age ranged from youngest being 15 months to oldest at 65 years. Females comprised 98.52% and males 1.48% where all the males were victims of sodomy. The type of offence most prevalent was rape (70.58%) followed by indecent assault (19.11%), with some cases of incest (7.35%). The Municipality with the greatest number of cases was Panauti (16.16%), followed by Panchkhal (13.23%) and Bhumlu with 10.29%. Out of the 136 cases analyzed, from Fiscal year 2076 to 15 Shrawan 2080, most of the cases took place in 2077 rounding up to 39 cases in Kavrepalanchowk district. However, noting the numbers in Fiscal year 2080, there seems to be a rapid rise of cases as there have already been 19 cases in four months' time.

## **Conclusion:**

The most vulnerable group for sexual offenses is the population below the age 20 which emphasizes the need of sex and moral education in the age group. The areas in Kavrepalanchowk district with increasing cases of sexual offenses should incorporate standardized protocols in implementing education as well as strict regulations of the community guidelines.

**Keywords:** Rape, Sexual offence, Sodomy