

Avoidable Deaths Network

Annual Report

August 2022 - July 2023

Prepared by

Nibedita S. Ray-Bennett
Lauren MacLeod
Isha Biswas
Hideyuki Shiroshita
Shahidul Hoque
Alexander Skinner

Table of Contents

Introduction to Members and Activities	2
Global Campaign: International Awareness Day for Avoidable Deaths	7
Country Chapters and Hubs	8
Activities and Achievements for 2022/2023	9
Projects: At a glance	30
Published Research Outputs	31
Conferences, Seminars, Workshops and Presentations	35
Press, Media and Impact	35
Annex 1: List of our Organisational Partners	39
Annex 2: A Year of Learning at the Avoidable Deaths Network	40

© Avoidable Deaths Network, 2023.

Introduction to Members and Activities

This report documents the activities undertaken by the **members** of the Avoidable Deaths Network (ADN) from 1 August 2022 to 31 July 2023. Members consist of the Core Team, Advisory Board, Regional Coordinators, and Interns.

The ADN was launched on 12 March 2019 at the 4th Summit of the Global Alliance of Disaster Research Institutes (GADRI) in Kyoto, Japan. This is the fourth annual report.

Our purpose (*why we exist*): To help policymakers and practitioners make better decisions to save lives and reduce injuries, for sustainable development.

Our vision (*what we want to achieve by 2030*): To be recognised as global leaders in avoidable deaths for impactful research, solution, and services.

Strategic areas: To achieve our vision by 2030, we focussed on two interrelated areas up until 2022. On 12 March 2023 we introduced a third area.

- 1. Promoting a global community for avoidable deaths.
- 2. Promoting research, networking and knowledge exchange.
- 3. Promoting the Global Campaign 'International Awareness Day for Avoidable Deaths' (IAD4AD) and the Campaign slogan 'Disaster Deaths Are Avoidable'.

To achieve these strategic areas, although not limited to, ADN conducts eight activities discussed below.

ADN is a member of the Sendai Framework Voluntary Commitments (VC) platform. We provide a six-month progress report to the Sendai Platform. The last report submitted was for the period July to December 2022. ADN's page on the UNDRR's VC platform can be viewed through this link:

https://sendaicommitments.undrr.org/commitments/20211123 001

ADN is also part of the University of Leicester's Institute for Environmental Futures' research challenge theme 'Climate Risk'. Dr Nibedita Ray-Bennett is the founding lead for this research challenge and is also part of the governing management board. The Research Institute for Environmental Futures is directed by Professor Heiko Balzter. It is under the ambit of the research challenge that the ADN's Global Campaign IAD4AD was launched and will be celebrated annually.

ADN is a member of the WHO's Partnership for Maternal, Newborn and Child Health (PMNCH) and of the HEUREKA Project – 'Civil Protection Knowledge Partnership Middle East'.

Members

As of 31 July 2023, the core Operations Team consisted of 27 members from 12 countries (**Table 1**). This is an increase of 15 compared to the previous academic year.

Table 1: List of Operations Team Members (July 2023)

#	Name	Role	Country
1	Dr. Nibedita Ray-Bennett	Founding President and Convenor	United Kingdom
2	Dr. Hideyuki Shiroshita	Founding President	Japan
3	Ms. Denise Corsel	Operations Manager (currently on study leave)	United Kingdom
4	Mr. Matt Merry	Marketing Consultant	United Kingdom
5	Dr. Mahulika Sahoo	Editorial Manager	India
6	Dr. Winifred Ekezie	Evidence Synthesis Coordinator	United Kingdom
7	Dr. Aditya Ghosh	Science Society Interface Coordinator	United Kingdom
8	Mr. Abdullahi O. Umar	Global Campaign Coordinator	Nigeria
9	Mr. Shahidul Hoque	Activity Coordinator	Bangladesh
10	Ms. Lauren MacLeod	Activity Coordinator; Research Administrator	United Kingdom
11	Mr. Alex Skinner	Administrative Coordinator	Denmark
12	Mr. Julian Coetzee	Deputy Operations Coordinator	United Arab Emirates
13	Ms. Nimisha Goswami	Knowledge Exchange Public Engagement Coordinator	India
14	Dr. Nimra I. Choudhary	Knowledge Exchange Public Engagement Coordinator	Pakistan/ New Zealand
15	Mr. Tom Caley	Blog Copywriter	United Kingdom
16	Ms. Isha Biswas	Project Volunteer; Research Assistant	United Kingdom
17	Ms. Marina Yagi	ADN Japan Manager	Japan
18	Ms. Lilian Loescher	ADN Japan Research Administrator	Japan
19	Master Arkoneil Ghosh	Junior Champion Intern; Global Campaign Administrator	India
20	Miss Prarthona Datta	Junior Champion	Canada
21	Mr. Lasith Dissanayake	Project Volunteer	United Kingdom
22	Ms. Anusha Manahil	Project Volunteer	Pakistan
23	Mr. David Cowie	Project Volunteer	United Kingdom
24	Ms. Racheal Nantume	Project Volunteer	Uganda
25	Mr. Biswajit Paul	Project Volunteer	India
26	Ms. Srashta Choudhury	Project Volunteer	India
27	Ms. Kelly N. Litsoung	Project Volunteer	Germany

On 31 July 2023, the <u>Advisory Board</u> consisted of 21 multi-disciplinary world-renowned Members from 13 different countries (**Table 2**). Of these 21 members, six are new.

Sadly, we lost our founding Advisory Board Member, Professor Peter Jackson in August 2022.

Table 2: List of Advisory Board Members

#	Date of Joining	Name	Institution	Country
21	July 2023	Col. Sanjay Srivastava	Climate Resilient Observing- Systems Promotion Council (CROPC)	India
20	July 2023	Dr. Matthew Lewin	Ophirex, Inc.	United States of America
19	July 2023	Dr. Stephen Samuel	Ophirex, Inc.	United Kingdom
18	March 2022	Mr. Samuel Akera	United Nations Development Programme (UNDP)	Ethiopia
17	March 2022	Ms. Pamela Komujuni-Kalule	Office of the Prime Minister	Uganda
16	March 2022	Professor Alois Hirschmugl	Disaster Management, Advice and Training (DMAT) Consulting KG	Austria
15	April 2022	Dr. Tony Moore	Previous: Institute of Civil Protection and Emergency Management (ICPEM)	United Kingdom/ Turkey
14	July 2021	Mr. Mohammed Ali Said Albadi	YAS Centre for Health and Environment	Oman
13	February 2021	Mr. David Wales	SharedAim	United Kingdom
12	February 2021	Professor Michael G. Petterson	Auckland University of Technology	United Kingdom/ New Zealand
11	January 2020	Mr. Steve Glovinsky	PeerConnect	United States of America
10	July 2019	Professor Daniel Ladley	University of Leicester	United Kingdom
9	March 2019	Professor Norio Okada	Kyoto University	Japan
8	March 2019	Dr. Ambika Prasad Nanda	Tata Steel	India
7	March 2019	Mr. Mihir R. Bhatt	All India Disaster Mitigation Institute (AIDMI)	India
6	March 2019	Ms. Aditi Ghosh	ChildFund International	Sri Lanka/ India
5	March 2019	Ms. Patience Fyne Andrew	Graça Machel Trust	Nigeria/ South Africa
4	March 2019	Ms. Magda Stepanyan	Risk Society	Netherlands

3	March 2019	Mr. Hamdou Wane	Albida International LLC	Senegal
2	March 2019	Ms. Cecilia Aipria	United Nations Development Programme (UNDP)	Ethiopia
1	March 2019	Professor Heiko Balzter	University of Leicester	United Kingdom

The role of <u>Regional Coordinator</u> runs for two years. As of 31 July 2023, the ADN had 18 Regional Coordinators from ten different countries for the two-year term 2023 - 2025 (**Table 3**). From 1 March 2023, a new cohort of seven Regional Coordinators began their tenures for two years, with 11 Regional Coordinators from the previous tenure continuing their position.

Table 3: List of Regional Coordinators (2023 - 2025)

#	Date of Joining	Name	Institution	Country
18	May 2023	Professor Deepthi Wickramasinghe	University of Colombo	Sri Lanka
17	May 2023	Mr. Rohan Cooray	Asian Development Bank	Sri Lanka
16	April 2023	Mr. Ranjit Mahalik	Manthan	India
15	April 2023	Mr. Muhammad Ferdaus	BRAC University	Bangladesh
14	April 2023	Dr. Ranjan Datta	Mount Royal University	Canada
13	April 2023	Dr. Jebunessa Chapola	University of Regina	Canada
12	March 2023	Mr. Snehendu Koner	CliniMed LifeSciences	India
11	Dec 2021 Mr. K.G. Mahendra Jagath Disaster Managem		Disaster Management Centre	Sri Lanka
10	April 2021	Dr. Inshah Malik	New Vision University	Georgia
9	March 2021	Ms. Shaiza Khawaja	Amir Jafri & Associates	Pakistan
8	March 2021	Ms. Anuradha Bharwaj	Doers	India
7	April 2019	Dr. Yazidhi Bamutaze	Makerere University	Uganda
6	April 2019	Dr. Fatima Akter	University of Dhaka	Bangladesh
5	March 2019	Mr. Dillip Pattanaik	Orissa State Volunteers and Social Workers Association	India
4	March 2019	Mr. Krishna Clarke	Caribbean Development Bank	Barbados
3	March 2019	Dr. Edris Alam	Disaster and Development Organisation	Bangladesh
2	March 2019	Dr. Azukaego Nnaji	APIN Public Health Initiatives	Nigeria
1	March 2019	Mr. Daniel Mendez	National Emergency Management Organization	Belize

Between 1 August 2022 and 31 July 2023, ADN had seven interns from five different countries, namely, Ms. Isha Biswas, Mr. David Cowie, Dr. Nimra I. Choudhary, Ms. Kelly Litsoung, Mr. Phillip Best and Ms. Elora Kalita.

As of 31 July 2023, the total number of Members was 782, which is 132 more than the previous year (20.3% increase since July 2022 when there were 650 members). This includes 23 Operations Team Members, 21 Advisory Board Members, 18 Regional Coordinators, 21 Collaborator and Partner Organisations, and 699 Affiliates.

Global Campaign: International Awareness Day for Avoidable Deaths

<u>International Awareness Day for Avoidable Deaths (IAD4AD)</u> was launched on 13 March 2023 at Texpia Osaka, Izumiotsu, Osaka, Japan. The purpose of this global campaign is:

- To raise the visibility of disaster deaths, especially indirect disaster deaths and missing persons and capture their impact on the lives and livelihoods of the deceased family members;
- To capture the causes and circumstances that lead to disaster deaths so that contextspecific interventions can be put in place to save lives;
- To promote the slogan 'Disaster Deaths Are Avoidable'. They are avoidable through preventable, amenable and risk governance measures; and

IAD4AD will be celebrated annually on 12 March with the hope that the campaign leads to reducing the actual number of lives lost from disasters and valuing the number of lives saved.

The launch of the global campaign was funded by the Institute for Environmental Futures, ESRC Impact Acceleration Account Event/Networking Fund, Kansai University, and the University of Leicester's Participatory Research – Impact Fund.

Cultural Assets

To mark the day, ADN developed <u>cultural assets</u>, consisting of:

- A dedicated website
- Guidance for Campaigners Handbook
- 13 key global messages to support International Awareness Day for Avoidable Deaths
- Two graphics: 'Disaster Deaths Are Avoidable'
- Digital tile: 'International Awareness Day for Avoidable Deaths, 12 March, #avoidabledeathsday'
- Promotional Video: 'International Awareness Day for Avoidable Deaths, Disaster Deaths Are Avoidable, 12 March, #avoidabledeathsday'
- Flyer: 'International Awareness Day for Avoidable Deaths; Purpose, Goal and Impact'
- Dynamic Toolkit, consisting of i) a tool to capture human stories of disaster deaths; ii)
 a tool to map stakeholders responsible to reduce disaster deaths at local and
 national levels.

Three-Day Launch Event in Japan

The global campaign was inaugurated over three days:

- **12 March 2023:** The 'International Awareness Day for Avoidable Deaths Brainstorming Session' took place at the Kansai University's Umeda Campus in Osaka.
- **13 March 2023:** The 'Launch of a Global Campaign: International Awareness Day for Avoidable Deaths' took place at Texpia Osaka, Izumiotsu in Osaka.

14 March 2023: The *'Kansai University Senriyama Campus Visit'* was hosted by the Vice President of Kansai University, Professor Takao Fujita, followed by a reflective *'International Awareness Day for Avoidable Deaths Debrief Meeting'* between the two Presidents, Drs. Nibedita Ray-Bennett and Hideyuki Shiroshita.

Table 4: International Awareness Day for Avoidable Deaths Events 2023

Date	Country	Event	Host
10 March 2023	Sri Lanka	Celebration of ADN's Fourth Birthday in Sri Lanka: International Awareness Day for Avoidable Deaths	Mr. K.G. Mahendra Jagath Regional Coordinator, Avoidable Deaths Network Deputy Director, Emergency Operations Centre, Disaster Management Centre Sri Lanka
12 March 2023		International Awareness Day for Avoidable Deaths Brainstorming Session	
13 March 2023	Japan	Launch of a Global Campaign: International Awareness Day for Avoidable Deaths	Dr. Hideyuki Shiroshita Founding President, Avoidable Deaths Network Associate Professor in Disaster
14 March 2023		Kansai University Senriyama Campus Visit	Mitigation and Safety Education, Kansai University
14 March 2023		International Awareness Day for Avoidable Deaths Debrief Meeting	

<u>Event Highlights</u> were published on 19 April 2023 and a <u>Proceedings Report</u> was published on 12 May 2023. The events were featured in six <u>press</u> articles.

The outcome of the global campaign's Brainstorming Session brought clarity to ADN Chapters and Hubs, and they are mentioned below.

Country Chapters and Hubs

<u>Country Chapters</u> are the local chapters of the ADN; their purpose is to carry out local activities. The Chapter brings together a number of actors to create a community representing

different sectors, networks, and at-risk groups involved in reducing avoidable disaster deaths. The Chapter can be hosted by an organisation or a number of organisations, and must be led by a Regional Coordinator, as the host organisations' point of contact.

As part of the global campaign, we aim to promote networking and research around avoidable deaths through the launch of Country Chapters. We aim to create 100 Country Chapters over ten years (2023 - 2033), with 50 by 2028. We will focus on lower-middle and low-income countries with the highest burden of disaster-related deaths.

Since, March 2023, two ADN Country Chapters were launched, and the India Chapter and Hub strategies were revised. Thus far, ADN has three Country Chapters (**Table 5**).

Date of Inauguration	Country	City	Host
25 June 2023	Oman	Al Buraimi	YAS Centre for Health and Environment, YAS Hospital
18 June 2023	Bangladesh	Dhaka	Department of Meteorology, University of Dhaka
11 September 2019	India	Bhubaneswar	Orissa State Volunteers and Social Workers Association

Table 5: Country Chapters

Research Hubs are academic institutions or other organisations that carry out research related to reducing avoidable disaster deaths. Research ideas are generated by Country Chapters or ADN networks, ensuring the research is relevant to the knowledge gaps or innovative initiatives identified by ADN Communities. The researchers involved should be Community members, but their research is carried out independently. Research Hubs could also carry out joint research projects with other Hubs or participate in research consortiums. Thus far, ADN has one Research Hub in India led by Orissa State Volunteers Social Workers Association (Table 6).

Table 6: Research Hubs

Date of Inauguration	Country	City	Host	Facilities
18 December 2019	India	Bhubaneswar	Orissa State Volunteers and Social Workers Association	Office and accommodation for 15 interns/ research fellows

Activities and Achievements for 2022/2023

To achieve the ADN's purpose, eight activities were undertaken are as follows:

1) Foster trans-disciplinary ideas, partnerships and solutions to reduce avoidable disaster deaths and people affected by disasters for sustainable development in low-and

- middle-income countries, through knowledge exchange events (conferences, symposiums and webinars).
- 2) Raise visibility and awareness of the Sendai Framework's first two targets, through publications, knowledge exchange events, and global campaign.
- Develop capacities of disaster responders and other stakeholders, through continuing professional development courses, knowledge exchange events and an information repository.
- 4) Develop lifesaving tools, kits, interventions, innovative technologies, governance models and theories to reduce the burden of maternal mortality, snakebite mortality, drowning mortality during disasters, and tsunami mortality through evidence-based pioneering research on hazards, exposures, vulnerability and risks.
- 5) Strengthen connections between disaster responders, through leveraging existing and promoting novel networking platforms.
- 6) Nurture future leaders for Avoidable Deaths and improve their leadership and employability skills, through expert mentoring and engaging interns for activities related to 1-5.
- 7) Publishing a Newsletter and Bulletins for knowledge exchange; and
- 8) Actively soliciting and securing private and public funds to promote the above activities.

Activity 1: Foster trans-disciplinary ideas, partnerships and solutions to reduce avoidable disaster deaths and people affected by disasters for sustainable development in low-and middle-income countries, through knowledge exchange events (conferences, symposia and webinars).

Special Session Webinars: The Special Session on Avoidable Deaths was launched on 4th December 2020 at the 'International Conference on Geographical Science for Resilient Communities, Ecosystems and Livelihoods under Global Environmental Change' organised by Makerere University in Kampala, Uganda. The Special Sessions are knowledge exchange and engagement webinars delivered virtually to the public for free with the aim of raising awareness on the concept of avoidable deaths and their avoidance through theoretical and practical solutions, or both. The Special Sessions also raise knowledge and awareness on those deaths that are often not in the mainstream agenda of policy makers, practitioners, and even academia. World-class researchers, experts and practitioners are invited to speak at the Special Sessions.

The ADN's Core Team in collaboration with Regional Coordinators, Organisational Partners and Advisors organised nine virtual/hybrid Special Sessions in New Zealand, Sri Lanka, United Kingdom, Pakistan, Uganda and India (**Table 7**). The sessions welcomed 40 world-class speakers and garnered 838 participant registrations.

The Special Session webinar series on <u>Women's Stories of Survival, Innovation, Resilience</u> <u>and Development</u> was launched on 8 March 2023 and featured three sessions aimed to capture women's stories of survival, innovation, resilience and sustainability in exceptional circumstances such as political crisis, climate-related disasters, human-induced resource scarcity (among others). Dr Nibedita Ray-Bennett was the chairperson of these webinars.

Before and after each of the Special Sessions, the participants were asked to answer questions about their level of confidence and knowledge of the topics covered in the Special Session. The questions were asked using a 5-level Likert scale, where 1 = not at all confident, and 5 = very confident. The results showed a significant increase in the proportion of positive responses (very confident and moderately confident) after Special Sessions (see **Table 3**). It can be concluded that the Special Sessions provided expert knowledge related to avoidable deaths to the participants. The increase in the overall percentage of positive responses after the sessions and the fact that no one responded "not at all confident" for the sessions suggest that the Special Sessions were meaningful, regardless of the level of participant's experience.

Table 7: Special Sessions 2022 - 2023

Date	Title of Special Session	Facilitating Organisation	Impact	
7 July 2023	Women's Stories of Survival, Innovation, Resilience and Development: Reducing Avoidable Baby and Women's Deaths Through Improved Rights and Ecosystem for Breastfeeding	Bringing Research for International Development and Global Equity (BRIDGE) Network and Auckland University of Technology	Number of speakers: three Registered participants: 89 Results of confidence and knowledge poll (5-level Likert scale): Before (n=32): 21.9% very; 28.1% moderately, 15.6% somewhat; 21.9% only slightly; and 12.5% not at all. After (n=30): 43.3% very; 40% moderately; 13.3% somewhat; 3.3% only slightly; and 0% not at all. Feedback from participants: 'Thank you to all three presenters- it was a learning session. Also, thanks to the organizing team!' 'Thank you for organising this session. It was very interesting, and I learned a lot from the presenters' 'The Sessions were very interesting. The presentation was fine. Thanks'	
31 May 2023	Women's Stories of Survival, Innovation, Resilience and Development: Stories of Resource Scarcity, Security and Sustainability of South Asian Women	South Asia Alliance of Disaster Research Institutes (SAADRI) – Sri Lanka Chapter and University of Colombo	Number of speakers: five Registered participants: 36 Results of confidence and knowledge poll (5-level Likert scale): Before (n=20): 20% very; 25% moderately, 40% somewhat; 5% only slightly; and 10% not at all. After (n=14): 78.6% very; 14.3% moderately; 7.1% somewhat; 0% only slightly; and 0% not at all. Feedback from participants: 'Thank you to all the participants for enriching presentations. This platform gave me an opportunity to get a comprehensive picture of situations in South Asian countries'	
8 March 2023	Women's Stories of Survival, Innovation, Resilience and Development: Between Hope and Fear - Afghan Women and Girls in Political Transition	School of Business and Institute of Environmental Futures, University of Leicester and New Vision University	Number of speakers: five Registered participants: 35 Due to the sensitive nature of the topic, the session voluments and feedback statements were not recorded.	
19 January 2023	Workshop on Building Capacity of Health Journalists on Reporting Disasters Triggered by Natural	International Center for Chemical and Biological Sciences (ICCBS), Sindh Innovation Research,	Number of speakers: six Registered participants: 248 Results of confidence and knowledge poll (5-level Likert scale): Before (n=22): 31.8% very; 31.8% moderately, 22.7% somewhat; 9.1% only slightly; and 4.5% not at all. After (n=21): 52.4% very; 28.6% moderately; 9.5% somewhat; 0% only slightly; and 9.5% not at all.	

	Hazards and Human Activities	and Education Network (SIREN) and the Pakistan Academy of Sciences (PAS, Sindh Chapter)	
7 December 2022	Neglected Areas of Disaster Loss and Damage	2nd International Conference on 'Geographical Science for Resilient Communities, Ecosystems and Livelihoods under Global Environmental Change (GORILLA), Makerere University	Number of speakers: five Registered participants: 60 Results of confidence and knowledge poll (5-level Likert scale): Before (n=30): 10% very; 14% moderately; 33% somewhat; 24% only slightly; and 19% not at all. After (n=30): 31.8% very; 31.8% moderately, 22.7% somewhat; 9.1% only slightly; and 4.5% not at all. Feedback from participants: 'Thank you very much for an informative and insightful event. Looking forward to the next one' 'Many thanks for your insight and advice on the continuous improvement elements of Disaster Recovery and Management' 'Thank you to the wonderful speakers and organising team, great job and very informative about the challenges and opportunities in the new L&D space'
14 November 2022	Workshop on Raising Awareness on Intercultural Understanding of the Environment	University of Sheffield	Registered participants: 15 There was no poll because this was a closed webinar.
17 October 2022	Building Climate Resilient Healthcare Infrastructure: Post Disaster Scenario in Pakistan	Pakistan Academy of Sciences (PAS, Sindh Chapter), International Center for Chemical and Biological Sciences (ICCBS) and Sindh Innovation Research, and Education Network (SIREN)	Number of speakers: five Registered participants: 271 There was no poll. Feedback from participants: 'Excellent Session' 'Very informative session. Kindly share slides of the session' 'A very informative session from over all speakers and I seek very different things which is so fascinating for me.'
13 October 2022	International Day for Disaster Risk Reduction: Early warning and early action for all	-	Number of speakers: two Registered participants: 44 There was no poll. Feedback from participants: 'It is important that disaster education occurs in schools in terms of early warning alert and message propagation. The media have an important role to play'

			'I am currently working on a PhD in relation to early warning systems in order to build resilience amongst banana farmer in Uganda and would like to collaborate' 'This was an excellent session thank you'
30 September 2022	International Snakebite Awareness Day: Challenges and opportunities to reduce avoidable snakebite deaths in Odisha/ India	Orissa State Volunteers Social Workers Association	Number of speakers: nine Registered participants: 40 Results of confidence and knowledge poll (5-level Likert scale): Before (n=20): 20% very; 30% moderately; 30% somewhat; 15% only slightly; and 5% not at all. After (n=11): 81% very; 9.1% moderately, 9.1% somewhat; 0% only slightly; and 0% not at all. Feedback from participants: 'Amazing work! it just proves you do not need fancy equipment to save lives. knowledge and compassion is the true driving force' 'Thanks a lot for these interesting lectures - I did not know so much about the traditional tribal healers - but only can support the idea to include them in treatment measures as they are mostly the first responders as said' 'This has been a superbly informative session! Sincere thanks to the organizers and the speakers' 'Fascinating and Informative session' 'So inspiring and informative. I had no idea [about AND], truly. My colleague and I are sitting here agreeing this is our favourite meeting in years'

Figure 2: Flyers of the Special Sessions



Two-Day Symposium – Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India: As part of the research project 'Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India', led by the India Hub, the project team organised a Two-Day Symposium in collaboration with 14 organisations. The event on 20 and 21 June 2023 in Bhubaneswar was funded by the University of Leicester Institute for Advanced Studies and Institute for Environmental Futures. The Two-Day Symposium commenced with a Brainstorming Workshop focusing on the nitty-gritty of a context-specific knowledge-exchange network (KEN) platform and was attended by 41 people. The second day – Experts' Presentations featured 15 experts who shared their perspectives on the issue of snakebite from the six emergent categories of stakeholders. The Experts' Presentations event was attended by 128 participants in person, with 120 views on the YouTube livestream. Following the Two-Day Symposium, it was clear that there is a need for a KEN which should be piloted in the state of Odisha.

A <u>Proceedings Report</u> was prepared upon request from the Honourable State Minister of Rural Development, Skill Development and Technical Education Odisha, Mr. Pritiranjan Gharai, and provides four actionable recommendations to reduce avoidable snakebite deaths in Odisha with relevance for other high-burden snakebite states. To date, the project has been featured in 15 news articles.

TWO-DAY SYMPOSIUM:

Exploring the Feasibility and Value of Pioneering Partnerships and a Knowledge-Sharing Network to Reduce Avoidable Snakebite Deaths in India

Tuesday 20 June:

Brainstorming Workshop at Hotel New Marion, Bhubaneswar, Odisha, India

Wednesday 21 June:

Experts' Presentation at Hotel Suryansh, Bhubaneswar, Odisha, India

(www.youtube.com/live/Lu8l/UEV/ISSA)

Facilitators

Avoidable Deaths Network India Hub and Orissa State Volunteers and Social Workers Association

Figure 3: Flyer of the Two-Day Symposium

High-Level Round Table Meeting – Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India: As part of the research project 'Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India', the project team organised a High-Level Round Table Meeting on 23 June 2023 in collaboration with the Climate Resilient Observing Systems Promotion Council. The event in New Delhi orientated 28 key stakeholders about the findings of the seven-month feasibility study for a pioneering KEN to reduce avoidable snakebite deaths in India. The event was funded by the University of Leicester Institute for Advanced Studies and Institute for Environmental Futures.

Consultations with Stakeholders – Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India: As part of the research project 'Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India', the project team organised a 90-minute virtual consultation on 25 May 2023. A total of 20 participants from four countries attended, of which the majority were from India (65%), across nine states. They consisted of health care professionals, four antivenom professionals, public awareness professionals, and snake profiling professionals. The virtual consultation explored three questions i. What can be done to reduce the number of snakebite deaths in India? ii. What are the issues facing your own occupation that constrain your ability to reduce the number of snakebite deaths? and iii. What could be gained through increased communication and coordination between people in your occupation and others involved in reducing snakebite deaths?

Meetings with Stakeholders: As part of the research project 'Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India', the project team held 17 formal meetings with collaborators and convenors (gatekeepers), specifically i. monthly meetings, ii. stakeholder mapping meetings and iii. convenor meetings. From December 2022 to July 2023, we held seven monthly meetings; five stakeholder mapping meetings on the states of Odisha and Assam, as well as a Brainstorming Stakeholder Categories meeting; and five one-to-one meetings with Mr. Gnaneswar Chandrasekharuni (Madras Crocodile Bank Trust and Centre for Herpetology), Dr. G.V. Ramana Rao (EMRI Green Health Services), Dr. Omesh Bharti (Himachal Pradesh State Institute of Health and Family Welfare), Dr. Milind Khadilkar (Premium Serums) and Mr. Vivek Sharma (Independent Biologist).

Activity 2: Raise visibility and awareness of the Sendai Framework's first two targets (A&B), through publications, and knowledge exchange events.

Knowledge exchange events

See Activity 1 above.

Publications related to Sendai Framework's first two targets by the core team:

Few, R; Omasete, J; Geere, JAL; Ray-Bennett, NS (2023) Climate change and drowning risk in Bangladesh and Tanzania and the implications for RNLI programmes. <u>DEV-RPP-24-V4.pdf</u> (uea.ac.uk)

Ray-Bennett, N.S. and Shiroshita, H. (2023) *International Awareness Day for Avoidable Deaths (IAD4AD): Guidance for Campaigners*. UK and Japan: Avoidable Deaths Network Publication.

Ray-Bennett, N.S., MacLeod, L., Ghosh, A. and Shiroshita, H. (2023) *Proceedings: International Awareness Day for Avoidable Deaths*. UK and Japan: Avoidable Deaths Network Publication.

Ray-Bennett, N.S., Clarke, K., and Mendez, D. (2022) Sendai Framework's Global Targets A and B: Opinions from the Global Platform for Disaster Risk Reduction's Ignite Stage 2019. *International Journal for Disaster Risk Science*, 13: 651-663. https://doi.org/10.1007/s13753-022-00432-3

Ray-Bennett, N.S. Clarke, K. Mendez, D. (2022) 'Global Platform for Disaster Risk Reduction's Ignite Stage 2019: Opinions of Key Stakeholders', *Newsletter*, 3. UK and Japan: Avoidable Deaths Network Publication. https://www.avoidable-deaths.net/2022/12/23/updates-on-sendai-goals-1-and-2-3/

Shiroshita, H. (2022) 'Junior Champions' Work on Avoiding Deaths of Tsunamis', *Newsletter*, 3. UK and Japan: Avoidable Deaths Network Publication. https://www.avoidable-deaths.net/2022/12/23/junior-champions-work-on-avoiding-deaths-of-tsunamis/

Sahoo, M. and Ray-Bennett, N.S. (2022) 'Deaths due to Lightning in the Tribal Regions of Odisha, India', , *Newsletter*, 3. UK and Japan: Avoidable Deaths Network Publication. https://www.avoidable-deaths.net/2022/12/23/deaths-due-to-lightning-in-the-t0ribal-regions-of-odisha-india/

Ray-Bennett, N.S. Sahoo, M. (2022) 'Odisha carries a huge burden of snakebite deaths — but it is avoidable', *Down To Earth.* https://www.downtoearth.org.in/blog/wildlife-biodiversity/odisha-carries-a-huge-burden-of-snakebite-deaths-but-it-is-avoidable-84787

Ray-Bennett, N.S. Caley, T. Samuel, S. (2023) 'Right anti-venom, given on time, can reduce snakebite deaths in India', *Down To Earth*. https://www.downtoearth.org.in/test/blog/right-anti-venom-given-on-time-can-reduce-snakebite-deaths-in-india-88507

Ray-Bennett, N.S. Caley, T. (2023) 'Turkey-Syria Earthquakes: Reducing avoidable indirect deaths', *Down To Earth.* https://www.downtoearth.org.in/blog/natural-disasters/turkey-syria-earthquakes-reducing-avoidable-indirect-deaths-87703

Avoidable Deaths Network. (2023) *Proceedings Report - Launch of a Global Campaign: International Awareness Day for Avoidable Deaths (IAD4AD)*. UK and Japan: Avoidable Deaths Network Publication. https://iad4ad.avoidable-deaths.net/wp-content/uploads/2023/07/IAD4AD-Proceedings-published.pdf

Avoidable Deaths Network. (2023) Event Highlight - Launch of a Global Campaign: International Awareness Day for Avoidable Deaths (IAD4AD). UK and Japan: Avoidable Deaths Network Publication. https://iad4ad.avoidable-deaths.net/wp-content/uploads/2023/07/IAD4AD-Highlight.pdf

Khawaja, S. Choudhary, N.I. Manahil, A. Ray-Bennett, N.S. (2023) *Pakistan Floods 2022 Resource Paper.* UK and Japan: Avoidable Deaths Network Publication. https://www.avoidable-deaths.net/wp-content/uploads/2023/02/Pakistan-Floods-2022-Resource-Paper.pdf

Engagements with external organisations to raise awareness of Sendai Frameworks first two targets See Activity 1 and the section on 'Conferences, Seminars, Workshops and Presentations'.

Through the Global Campaign: IAD4AD, Special Sessions, Consultation, Symposium and High-Level Round Table Meeting, ADN engaged with 1,288 people between 1 August 2022 and 31 July 2023.

The ADN has four media outlets to disseminate international, national, regional, and local news, research and innovative solutions to avoidable deaths. The media outlets are <u>Facebook</u>, <u>LinkedIn</u>, <u>Twitter</u> and a dedicated <u>website</u>. Two to three posts per week are published.

As of 31 July 2023, ADN had attracted 798 followers on LinkedIn. This was an increase of 339 followers (73.9%) in the past year. On Twitter, ADN had attracted 655 followers, an increase of 79 followers (13.7%) in the past year. On Facebook, ADN had attracted 617 followers, of which 34.1% are women and 65.9% are men. This was an increase of 51 followers (9%) in the past year. On Instagram, ADN had attracted 154 followers, of which 42.5% were women and 57.4% were men. This was an increase of 83 followers (116.9%) in the past year. On ADN's website there is a dedicated section on Resources, which consists of i. Publications and Materials, ii. Newsletter, iii. Project Outputs, iv. Repository of Snakebite Information, v. Repository of COVID-19 Information, vi. Relevant Publications, vii. Videos and Podcasts.

Activity 3: Develop capacities of disaster responders and other stakeholders, through continuing professional development (CPD) courses, knowledge exchange events and an information repository.

CPD: From 27 to 31 March 2023, Dr Nibedita Ray-Bennett (as Programme Director) successfully ran an Executive Programme on 'Managing Risk, Crisis and Disasters' for Homeland Security in the Home Office, UK. The programme was attended by 17 participants. 92% of the participants found the sessions moderately/very informative (the remaining 8% found it somewhat informative). 79% are now very/moderately confident on the usefulness of topics introduced (the remaining 21% are now somewhat confident).

Professor Peter Jackson's Annual Lecture: On 13 March 2023, Professor Peter Jackson's Annual Lecture was launched to celebrate his legacy of mentoring Future Leaders. Professor Rajib Shaw from Keio University was the first speaker who discussed the *Value of Mentoring Future Leaders for Disaster Risk Reduction and Sustainable Development*. This Lecture was part of the *Launch of a Global Campaign: International Awareness Day for Avoidable Deaths*.

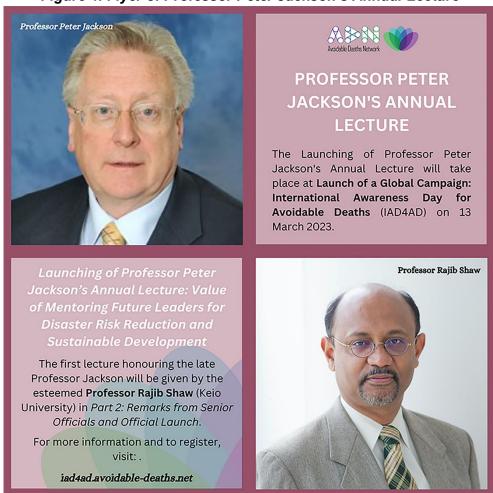


Figure 4: Flyer of Professor Peter Jackson's Annual Lecture

Knowledge exchange events

Please see the Activities 1 and 2.

Activity 4: Develop lifesaving tools, kits, interventions, innovative technologies, governance models and theories to reduce the burden of maternal mortality, snakebite mortality, drowning mortality during disasters, and tsunami mortality through evidence-based pioneering research on hazards, exposures, vulnerability and risks.

The previous and ongoing innovations of the Core Team is outlined below:

1. Knowledge-Exchange Network (KEN) Platform (work in progress): Also referred to as a Knowledge-Sharing Network (KSN) in older documents. A KEN would foster i) dialogue and discussions within and across stakeholder locations; ii) coordination, cooperation, and communication amongst stakeholders for resource-sharing and response at local levels; iii) identify scope for transformative interdisciplinary research; and iv) improve the capacity of local stakeholders.

Publications:

Ray-Bennett, N.S. MacLeod, L. Biswas, I. Samuel, S.P. Shiroshita, H. and Glovinsky, S. (2023) Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India. UK and Japan: Avoidable Deaths Network Publication. https://www.avoidable-deaths.net/wp-content/uploads/2023/07/PROCEEDINGS-REPORT-publishable.pdf

Avoidable Deaths Network (2023) *Proceedings Report - Launch of a Global Campaign: International Awareness Day for Avoidable Deaths (IAD4AD).* UK and Japan: Avoidable Deaths Network Publication. https://iad4ad.avoidable-deaths.net/wp-content/uploads/2023/07/IAD4AD-Proceedings-published.pdf

- 2. Avoidable Deaths Framework (ADF) (work in progress) is a research project that aims to capture the number of avoidable deaths from the effects of COVID-19 and economic lockdown in India (first phase), and how can we reduce disaster deaths that are avoidable. The number of deaths from the effects of COVID-19 is understood through the lens of an 'avoidable disaster deaths perspective', one that understands disaster deaths are both avoidable and unavoidable, and avoidable disaster deaths are of three types: amenable, preventable and disaster risk governance. The project is ongoing.
- 3. <u>Low-budget protocol for Facility Reproductive Health Kit and Crisis Reproductive</u> Health Kit (2021) was a protocol developed for two low-budget reproductive health (RH) kits.

The Facility and Crisis RH Kits are designed for the management of post-abortion complications including incomplete, septic and spontaneous abortion (before and after 12 weeks of missed menstruation). The former Kit is specifically designed to be used during disasters and humanitarian crises at primary, as well as secondary health facilities. The latter Kit is designed to be lightweight so that service providers can carry it to emergency response

facilities (e.g., flood-cum-cyclone shelters, safe homes, and refugee camps or any temporary disaster camps).

The Kits are designed on the principle of localisation and to save women and girls of reproductive age during disasters and crises.

Funded by Economic and Social Research Council [ES/X004732/1] Dr Nibedita Ray-Bennett is starting the prototyping of the RH Kits from 1st September 2023. The collaborators for this phase are Data Management Aid and Reproductive Health Services Training and Education Programme (RHSTEP).

Publication:

Ray-Bennett, N.S., Corsel, D.M., Khan, S.T., Haseen, F., Bhuiyan, M. and Goswami, N. 2021. *Introducing Reproductive Kits for Facility and Crisis Set-Ups.* IPPF-South Asia Region Office: New Delhi. https://www.ippfsar.org/resource/introducing-reproductive-health-kits-facility-crisis-set-bangladesh

4. Integrated intervention package RHCC (2019) is designed to improve the quality and availability of post-abortion care during a major flood at primary health care level with the overall aim of reducing maternal mortality and morbidity (SDG3, Sendai Target A)). The RHCC has three components: i) pre-positioning of Reproductive Health Kit prior to flooding; ii) Capacity building of health workers; and iii) Community awareness raising. The evidence-based RHCC package was first tested in Belkuchi, Bangladesh. The RHCC comes with a Structured Facility Assessment Tool and a Two-Step Checklist Facility Assessment Tool. These tools are designed to assess the capacity of the facilities for sexual and reproductive services including menstrual regulation and post-abortion care during disasters and humanitarian crises.

Publications:

Ray-Bennett, N.S., Corsel, D., Goswami, N. and Bhuiyan, M. 2021. 'RHCC Intervention: Strengthening the delivery and coverage of sexual and reproductive health care during floods in Bangladesh' *International Journal of Human Rights in Healthcare*, 14(4): 327-347 https://doi.org/10.1108/IJHRH-11-2020-0098

Ray-Bennett, N.S., Corsel, D., Goswami, N. and Ghosh, A. 2019. 'Understanding reproductive health challenges during a flood: Insights from Belkuchi Upazila, Bangladesh', *Gates Open Research* 2019(3): 788. http://dx.doi.org/10.12688/gatesopenres.12920.2

Ray-Bennett, N.S., Corsel, D., Goswami, N. and Jackson, P. 2019. 'Challenges and opportunities around reproductive health during a flood: Insight from Belkuchi upazila, Bangladesh'. Contributing Paper to *Global Assessment Report (GAR) 2019.*

Ray-Bennett, N.S., Corsel, D.M. and Goswami, N. 2019. *Exploring the Challenges and Opportunities Around Reproductive Health in Disasters in Belkuchi Upazila, Bangladesh.* IPPF Publication: London. https://www.ippf.org/resource/improving-quality-and-availability-post-abortion-care-humanitarian-crisis

Ray-Bennett, N.S., Corsel, D.M. and Goswami, N. 2019. *RHCC: Facilitating Opportunities for Reproductive Health Care during a Flood in Bangladesh.* IPPF Publication: London. https://www.ippf.org/sites/default/files/201904/IPPF%20Innovation%20Policy%20Brief%20PAC.pdf

Ray-Bennett, N.S., Corsel, D.M. and Goswami, N. 2019. *RHCC: Improving the Quality of Post Abortion Care during Floods in Belkuchi, Bangladesh.* IPPF Publication: London.

https://www.ippf.org/sites/default/files/20104/IPPF%20Innovation%20Policy%20Brief%20RH CC%20Approach_0.pdf

Ray-Bennett, N.S., Corsel, D.M. and Goswami, N. 2019. What do I do If I experience Complications After Receiving Post Abortion Care, IEC Poster, IPPF Publication: London. (English and Bengali).

https://www.ippf.org/sites/default/files/201904/IPPF%20Innovation%20Policy%20Brief%20PAC.pdf

5. Systems Failure Approach (2018): The research monograph *Avoidable Deaths* presents systems failure as an analytical tool to explain why deaths occur in disasters and how they may be reduced. The systems failure approach demonstrates that deaths in disasters are socio-technical failures, and that it is by rectifying systems failures and promoting systems alignment that deaths can be prevented.

Publications:

Coetzee, J. and McLeod, L. (2022) 'The Key Role of Women in Preventing Disaster Related Avoidable Deaths', *Intersectionality of Women Led Disaster Preparedness and Resilience*, 197: Southasiadisasters.net. https://reliefweb.int/report/india/intersectionality-women-led-disaster-preparedness-and-resilience-southasiadisastersnet

Ray-Bennett, N.S. and Shiroshita, H. 2019. Disasters, Deaths and the Sendai Framework's Target One: A Case for Systems Failure in Hiroshima Landslide 2014, Japan. *Disaster Prevention and Management*, 28 (6): 764-785 https://doi.org/10.1108/DPM-09-2019-0302

Ray-Bennett, N.S. and Shiroshita, H. 2019. Disasters, Deaths and the Sendai Framework's Target One: A Case for Systems Failure in Hiroshima Landslide 2014, Japan. Contributing Paper to Global Assessment Report (GAR) 2019. https://www.preventionweb.net/files/66627_f424finalnibeditas.raybennettdisast.pdf

Ray-Bennett, N.S. 2018. Avoidable Deaths: A Systems Failure Approach to Disaster Risk Management. Springer Nature: Switzerland. Environmental Hazard Series. https://link.springer.com/book/10.1007/978-3-319-66951-9

Ray-Bennett, N.S. 2017. Disasters, Deaths and the Sendai Goal One: Lessons from Odisha, India. *World Development.* 103(2018): 27-39. https://doi.org/10.1016/j.worlddev.2017.10.003

Ray-Bennett, N.S. 2016. Learning from Deaths in Disasters: The Case of Odisha, India. MEI Middle East-Asia Project (MAP) on Humanitarian Assistance and Disaster Relief: Rising to the Challenge? *MAP Bulletin*. http://www.mei.edu/content/map/learning-deaths-disasters-case-odishaindia

Activity 5: Strengthen connections between disaster responders, through leveraging existing and promoting novel networking platforms.

Projects that aim to promote novel networking platform/s

Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India (January - August, 2023): The Avoidable Snakebite Deaths Project is led by Dr Nibedita Ray-Bennett in collaboration with 14 collaborating organisations: University of Leicester, PeerConnect, Disaster Management Advice and Training Consulting KG, Kansai University, Sheffield University, All India Institute of Disaster Management, Orissa State Volunteers Social Worker's Association, Tata Steel, Kalahandi University, Doers, Zoological Survey of India, Indian Council of Medical Research, Indian Council of Medical Research - National Institute of Research in Tribal Health, Demow Rural Community Health Centre, Snake Helpline and All India Institute of Medical Science.

Over seven months, the project gained 11 gatekeepers (Champions/ Convenors) including nine institutions (Ophirex, Inc., Climate Resilient Observing-Systems Promotion Council, Amrita Institute of Medical Sciences and Research Centre, Premium Serums, Madras Crocodile Bank Trust and Centre for Herpetology, Himachal Pradesh State Institute of Health and Family Welfare, EMRI Green Health Services, and Bongaigaon Civil Hospital) and two independent snake rescuers.

This project led to the formation of an Avoidable Snakebite Deaths WhatsApp group of 50 cross-sectoral technical experts. Through this, we have accrued reliable sources information from our stakeholders which has been published on our website as a Repository of Snakebite Information. This page is regularly updated.

<u>to Reduce Avoidable Disaster Deaths in the Caribbean Region</u> (April - August, 2022): ADN carried out a series of stakeholder consultations from April to July 2022 funded by the University of Leicester's Knowledge Exchange Proof of Concept Fund with more than 100 participants across 21 Caribbean countries. This revealed a strong interest from all parties, as well as a positive reception from the Caribbean Disaster Emergency Management Agency (CDEMA) to act as the network's convener.

To realise the intentions expressed for connecting the key actors engaged in and supporting efforts to respond to disaster events in the Caribbean, a proposal entitled 'Implementing the Roadmap for a Caribbean First Responders Community (CFRC)' was submitted to CDEMA for consideration on 31 September 2022. We are awaiting approval.

This project was led by Dr Nibedita Ray-Bennett in collaboration with 11 collaborators including Mr Errol Maynard (Caribbean Association of Fire Chiefs and Barbados Fire Services (CAFC&BFS)), the late Professor Peter Jackson (School of Business/ University of Leicester), Dr Albrecht Beck (Founder and Director, Prepared International), Professor Alois Hirschmugl (Technical Director, Disaster Management Advice and Training (DMAT) Consulting KG), Mr Steve Glovinsky (Founder and President, PeerConnect), Mr David Wales (Shared Aim - UK), Dr Hideyuki Shiroshita (Kansai University, Avoidable Deaths Network (ADN) President), Mr Daniel Mendez (ADN Regional Coordinator-Belize), Mr Krishna Clarke (ADN Regional Coordinator-Barbados, Research Analyst at the Caribbean Development Bank), Mr Alexander Skinner (ADN Administrator, Second Sect. Communications, Climate and Public Diplomacy, the Foreign, Commonwealth & Development Office, Copenhagen) and Ms Keisha Linton (Regional Security System).

The collaborators of this project, Dr. Albrecht Beck, Professor Alois Hirschmugl and Mr. Alex Skinner took part in the Executive Programme delivered by Dr. Nibedita Ray-Bennett for the Homeland Security Team in the UK from 27 to 31 March 2023.

Additionally, this project has led to a new collaboration between Regional Coordinator – Belize, Mr. Daniel Mendez and project collaborator, Dr. Albrecht Beck (Prepared International) in 2023.

Projects that aim to leverage existing networking platform/s

<u>HEUREKA Project – Civil Protection Knowledge Partnership Middle East</u> (2022): This network is led by ADN's Organisational Partners Professor Alois Hirschmugl (Disaster Management Assistance Team) and Dr Albrecht Beck (Prepared International) in the Middle East.

Eastern Belt Network-India (2020 - ongoing): This network building project is led by Dr Nibedita Ray-Bennett and Mr Alex Skinner and ADN's Future Leaders, Srashta Chowdhury (University of North Bengal), Rwittambhara Kashyap (Tata Institute of Social Sciences – Assam), Biswajit Paul (University of North Bengal) and Meharaj Bano (Vellore Institute of Technology).

Disaster Response

<u>Syria and Turkey Earthquake Response</u> (8 February 2023): In the aftermath of the Syria and Turkey Earthquake, Dr. Nibedita Ray-Bennett was contacted by Mr. Eftychios Mantas, Roving Safety and Security Director - CRRD & Europe of the International Rescue Committee (IRC) to seek help on the following:

"If you or anyone you know have and are willing to share SOPs [Standard Operating Procedure] on how to house staff inside centres for temporary shelter safely? For example, gender segregation, additional safety measures we may need, etc."

All ADN Members were contacted for help: four different Standard Operating Procedures were received from International Federation of Red Cross and Red Crescent Societies, Hungary and Organisation of Eastern Caribbean States Commission, Disaster Management Centre of Sri Lanka, Caribbean Disaster Emergency Management Agency, and Climate Resilient Observing-Systems Promotion Council. These Standard Operating Procedures were provided to IRC within 48 hours.

The Coromondal Express rail accident Response (2 June 2023): The accident took place near Bahanaga Station in Balasore, Odisha. Around 288 people died and 4000 were admitted to hospital. The ADN India Hub is based in Odisha and a decision was taken to respond. Through private donations, INR 37,000 (£351) was raised. With the help of Dr Amarendro Mohapatra, a scientist at the Indian Council of Medical Research in Bhubaneswar funds were disbursed to 'WeCare' to provide a steady supply of drinking and hot water and food, transport and other requirements for victims. ADN India Hub also distributed some funds for water, food and other items to the injured patients admitted at the SCM Medical College and All India Institute of Medical Sciences.

Activity 6: Nurture future leaders for avoidable deaths and improve their leadership and employability skills, through expert mentoring and engaging Interns for activities related to 1-5.

Leaders for avoidable deaths

Leaders for avoidable deaths are of two types: Junior Champions (10-17 years old) and Future Leaders (18 years plus). They join ADN as interns. The aims of this scheme are: i) to promote social consciousness amongst leaders for avoidable deaths by involving them in various disaster risk reduction, health and development projects, knowledge exchanges and engagement activities; ii) to equip them with confidence, knowledge, experience and belief that they can be agents for change, and that they can make the planet a better place to live; and iii) to give opportunities to the youths and leaders (current and future) in relation to activity (i) especially from socio-economically challenged circumstances.

Junior Champions

<u>Junior Champions in Hama Elementary School, Japan</u> (April 2014-ongoing): On 7 July 2023, international delegates from Taiwan visited the Junior Champions at Hama Elementary School in Izumiotsu to play 12 disaster risk reduction games developed by the children under the guidance of Dr. Hideyuki Shiroshita.

On 13 March 2023, ten international delegates visited the Junior Champions to play the 12 games. In the afternoon, 55 Junior Champions attended the *Launch of a Global Campaign: International Awareness Day for Avoidable Deaths*, with a group of students presenting their unique board games to the audience.

On 7 February 2023, led by Dr. Hideyuki Shiroshita, the Junior Champions at Hama Elementary School engaged with their parents, teaching them games designed around disaster risk reduction.

On 7 December 2022, led Dr. Hideyuki Shiroshita, Junior Champions at Hama Elementary School developed and played games related to disaster risk reduction.

<u>ADN India Junior Champion</u> (April 2020-current): Master Arkoneil Ghosh (13 years of age) based in Mumbai; India joined ADN two years ago. He writes blogs and produces <u>posters</u> and <u>leaflets</u> for ADN.

Arkoneil attended the three-day launch event for International Awareness Day for Avoidable Deaths (IAD4AD) in Japan.

On 13 March 2023, he presented at the *Launch of a Global Campaign: International Awareness Day for Avoidable Deaths* on his activities to reduce avoidable deaths. Highlights of his speech were documented in the Proceedings Report.

Arkoneil has been appointed Intern Administrator for the IAD4AD Advisory Board and editor of a new magazine called the *ADN Junior Champion Magazine*.

Future Leaders

Between 1 August 2022 and 31 July 2023, ADN had seven interns from five different countries, specifically, Ms. Isha Biswas, Mr. David Cowie, Dr. Nimra I. Choudhary, Ms. Kelly Litsoung, Mr. Phillip Best and Ms. Elora Kalita.

The Interns worked on the following projects, events and publications during their 6-month internship period:

<u>Special Session Webinar Series – Women's Stories of Survival, Innovation, Resilience and Development</u> (March to July 2023): Led by Dr. Nimra I. Choudhary, Ms. Lauren MacLeod and Ms. Nimisha Goswami, Ms. Kelly N. Litsoung assisted with the organisation and facilitation of three webinars. Kelly participated in meetings with collaborators and speakers, prepared event materials and conducted Impact, Q&A/Chat and Registration Coordinatorsroles during the events. The webinar series is complete.

Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India (January to April 2023): Mr. David Cowie contributed to the project through case study research on the state of Odisha. Ms. Elora Kalita, Mr. Phillip Best and Ms. Isha Biswas assisted with notetaking and minute-writing at collaborator and case study meetings. Following her internship, Ms. Isha Biswas took on the role of Research Assistant for this project from April 2023 to July 2023. The project is ongoing.

Special Session on Building Climate Resilient Healthcare Infrastructure in the Context of 2022 Floods in Pakistan (17 October 2022): Under the guidance of Dr. Nibedita Ray-Bennett Dr. Nimra I. Choudhary organised the hybrid special session in collaboration with the Pakistan Academy of Sciences (PAS, Sindh Chapter), International Center for Chemical and Biological Sciences (ICCBS) and Sindh Innovation Research, and Education Network (SIREN) at the Dr. Panjwani Center for Molecular Medicine and Drug Research in Pakistan. Nimra chaired the event and presented on the Avoidable Deaths Network. Following this experience, Nimra took on the role of Knowledge Exchange Public Engagement Coordinator in January 2023.

Avoidable Deaths from the Effect of the COVID-19 Pandemic and Lockdown in India (September to December 2022): Ms. Isha Biswas and Mr. David Cowie were part of a team of 10 researchers who compiled30 case studies and coded 305 newspaper articles in India using the metrics of causes and circumstances of direct and indirect COVID-19 deaths. The project is ongoing.

Pakistan Floods 2022 Resource Paper (August to December 2022): Under the mentorship of Dr. Nibedita Ray-Bennett, Dr. Nimra I. Choudhary worked with Ms. Anusha Manahil and seven local content analysts to i. distinguish and classify existing networks of organisations working to provide aid in the flood-affected areas; ii. identify and quantify the connectivity of the existing networks in flood affected provinces of Pakistan; and iii. produce a credible resource to aid provision of donations to Pakistan for the relief efforts. The resource paper and appendix were published on 12 February 2023 following her period of internship.

Sexual and Reproductive Health Services in Remote and Hard to Reach (H2R) Areas of Bangladesh (July to December 2022): Dr Nibedita Ray-Bennett, Dr Winifred Ekezie and Ms. Isha Biswas worked with six project volunteers to complete this project. This research project investigated what sexual and reproductive health (SRH) for menstrual regulation, safe abortion, post-abortion care approach/interventions for service delivery exists in disaster settings to promote resilience in the health system; what components of these interventions were most effective in disaster-prone areas and what challenges and opportunities exist to meet the Sendai Framework's priority. Five databases, nine depositories, grey literature and preprints were searched. The findings of this study is currently under review with the International Journal for Disaster Risk Science.

Activity 7: Publishing Newsletter and Bulletins

Three Bulletins and one Newsletter were published from August 2022 to July 2023.

Avoidable Deaths Network. (2022) *ADN Summer – Winter Bulletin*. UK and Japan: Avoidable Deaths Network Publication. Available at: https://us3.campaign-archive.com/?u=57a8b7c75024b99d52df7a23b&id=8b5ac07b2f

Avoidable Deaths Network. (2022) *International Day for Disaster Risk Reduction* (*DRR*) *Bulletin.* UK and Japan: Avoidable Deaths Network Publication. Available at: https://us3.campaign-archive.com/?u=57a8b7c75024b99d52df7a23b&id=af09be9c32

Avoidable Deaths Network. (2022) *Newsletter*, ISSN 2435-2608, 4. UK and Japan: Avoidable Deaths Network Publication. Available at: https://mailchi.mp/12f1c6d2f0ab/adn-newsletter

Avoidable Deaths Network. (2023) *ADN Summer Bulletin*. UK and Japan: Avoidable Deaths Network Publication. Available at: https://www.avoidable-deaths.net/wp-content/uploads/2023/05/ADN-Summer-Bulletin-2023-FINAL.pdf

Activity 8: Actively soliciting and securing private and public funds to promote the above activities.

The details of successful grant awards (including contract research, research consultancy) for the period August 2022 – July 2023 follow:

- Project title: After COP26 Virtual Research Fellows. Funded Leicester Institute for Advanced Studies (LIAS) February-July 2022. Host/Mentor: Dr Nibedita Ray-Bennett. COP26 Research Fellow: Dr Yazidhi Bamutaze (ADN Regional Coordinator, Makerere University, Uganda). August 2022.
- Project title: Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India. Principal Investigator: Dr. Nibedita Ray-Bennett. Funder: Institute for Environmental Futures, University of Leicester. January – August 2022.
- Project title: Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India. Principal Investigator: Dr. Nibedita Ray-Bennett. Funder: Leicester Institute for Advanced Studies, University of Leicester. Collaborators: January - August 2023
- Campaign Title: International Awareness Day for Avoidable Deaths. Founders: Dr. Nibedita Ray-Bennett and Dr. Hideyuki Shiroshita. Funder: Institute of Environmental Futures, University of Leicester. January March 2023.
- Campaign Title: International Awareness Day for Avoidable Deaths. Founders: Dr. Nibedita Ray-Bennett and Dr. Hideyuki Shiroshita. Funder: Kansai University. September 2022 – March 2023.
- Campaign Title: International Awareness Day for Avoidable Deaths. Founders: Dr. Nibedita Ray-Bennett and Dr. Hideyuki Shiroshita. Funder: UKRI Economic and Social Research Council. January March 2023.
 - Project Title: *Identifying Gaps in Drowning Data Collection in Low-and Middle-Income Countries and the Actors Addressing Them.* Principal Investigator: Dr. Nibedita Ray-Bennett. Funder: Royal National Lifeboat Institution. August 2023 May 2024.
- Project Title: Prototyping Facility and Crisis Reproductive Health Kits in Bangladesh.
 Funder: Economic Social Research Council [ES/X004732/1] Collaborators:
 Reproductive Health Services Training and Education Program (RHSTEP), Data
 Management Aid, Bangladesh (DMA), Directorate General of Family Planning (DGFP),
 Ministry of Health and Family Welfare (MoH&FW), Government of Bangladesh. August
 2023- July 2024.

Unsuccessful Grants

None

Unsuccessful Public Engagement Bids

None

Projects: At a glance

From 1 August 2022 to 31 July 2023, the ADN team has been delivering eight projects. Three projects have been concluded, five are <u>ongoing</u>. **Table 8** shows details of the projects.

Table 8: 2022 - 2023 Projects

Dates	Project Title	Project Aim/s	Status
January – August 2023	Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India	To identify, map and assess the feasibility of context-specific, key stakeholders to form a knowledge-exchange network (KEN) platform to i) foster dialogue and discussions within and across three Indian states (Assam, Odisha and Madhya Pradesh); ii) foster coordination, cooperation, and communication amongst responders for resource-sharing and response at local levels; iii) identify scope for transformative research that combines social, medical and space sciences; and iv) improve capacity of local stakeholders.	Ongoing. Data collection complete. Proceedings report published. Funder to be submitted. Journal article to be written.
January – July 2023	Launching of global campaign: International Awareness Day for Avoidable Deaths	To raise visibility of disaster deaths, especially indirect disaster deaths and missing persons and capture impact on the lives and livelihoods of family members; to promote the slogan 'Disaster Deaths Are Avoidable'. This global campaign will be celebrated annually on 12 March, with the aim reducing the number of lives from disasters and valuing the saved lives.	Launch event complete. Global campaign ongoing.
July 2022 – June 2023	Sexual and Reproductive Health Services in Remote and Hard to Reach (H2R) Areas of Bangladesh	To increase access to SRH services for menstrual regulation and post abortion care in disaster prone H2R health facilities of Bangladesh.	Ongoing – publication phase. Project discontinued due to fund transfer challenges. ADN Project Volunteers under the mentorship of Dr. Nibedita Ray-Bennett and Dr. Winifred Ekezie concluded 8-months systematic review and the findings of this study are currently under review for journal publication.
March – August 2022	Exploring the Feasibility and Value of a Regional	To identify capacity gaps and coordination opportunities for first responders in the Caribbean, to shorten	Complete and awaiting approval from Caribbean

	Network for First Responders (RN4FR) to Reduce Avoidable Disaster Deaths in the Caribbean Region	response times and ensure a well-coordinated relief effort to reduce avoidable disaster deaths.	Disaster Emergency Management Agency.
2020 – ongoing	School Pupils in Osaka are Champions for Avoidable Deaths from Tsunamis	To reduce avoidable tsunami deaths by engaging with school pupils and "at risk" community, raise awareness on tsunami prediction, and create a culture of preparedness by producing Information, Education and Communication (IEC) materials, magazines and continuous exercises and drills.	Ongoing.
November 2020 to September 2022	Avoidable Deaths from Snakebites during Disasters in Odisha, India	To understand the causes and circumstances that lead to snakebite deaths during disasters in Odisha. The project was initiated to i. investigate the complex micro-interactions between systems, including gender and the cause of high-risk areas to understand the true burden of snakebite deaths; ii. explore the causes and circumstances leading to avoidable snakebite deaths during disasters; iii. identify localised risk governance that could lead to reducing snakebite deaths.	Complete.
April 2020 – ongoing	Eastern Belt Network – India	To identify and map the number of colleges and universities that offer programmes related to risk, crisis, disaster management, development, and avoidable deaths in the 10 eastern states of India and explore the feasibility of developing a network for avoidable deaths, disaster risk reduction and sustainable development.	Ongoing –report writing phase
April 2020 – ongoing	Avoidable Deaths from the Effect of the COVID-19 and Lockdown in India	To study the number of avoidable deaths from the effect of COVID-19 and economic lockdown using the novel Avoidable Deaths Framework (ADF).	Ongoing- writing up and publication phase.

Published Research Outputs

A small selection of peer reviewed publications of ADN's Core Team and Regional Coordinators in Bangladesh, Canada, Sri Lanka, India, Japan, Uganda and UK are presented below.

Journal Articles

Abdullah-Al-Mahbub, M. Islam, A.R.M.T. Alam, E. Asha, M.R. (2023) 'Sustainable solar energy potential on marine passenger ships of Bay of Bengal: A way of reducing carbon dioxide emissions and disaster risk reduction', *Energy Exploration and Exploitation*. Available at: https://doi.org/10.1177/01445987231173097

Acharibasam, J. B. & Datta, R. (2023) 'Enhancing community resilience to climate change disasters: Learning experience within and from sub-Saharan black immigrant communities in western Canada', *Sustainable Development*. Available at: https://doiorg.libproxy.mtroyal.ca/10.1002/sd.26775

Alam, E. (2023) 'A Modified Mercalli Intensity map of Bangladesh: a proposal for zoning of earthquake hazard', *Fronteirs in Earth Science*, 11. Available at: http://dx.doi.org/10.3389/feart.2023.1187176

Alam, E. Sufi, F. Islam, A.R.M.T. (2023) 'A Scenario-Based Case Study Using AI to Analyze Casualties from Landslides in Chittagong Metropolitan Area', *Sustainability*, 15(5). Available at: https://doi.org/10.3390/su15054647

Datta, R. (2023) 'Climate change challenges & solutions: Anti-racist perspectives from a Bangladeshi-Canadian immigrant researcher from & within the racialized community', *Anti-Racism Policy Journal, a Harvard Kennedy School Publication*: 55-60. Available at: https://bit.ly/arpj2023

Datta, R. (2023) 'Editorial: Anti-Racist Perspectives of Sustainabilities', *Societies*, 13 (124). Available at: https://doi.org/10.3390/soc13050124

Datta, R., Chapola, J., Datta, P., & Datta, P. (2023) 'Resiliency in disaster: The Relevance of Indigenous Land-based Practice', *Journal of Indigenous Social Development*, 11(2): 67-88. Available at: https://journalhosting.ucalgary.ca/index.php/jisd/article/view/73542/56669

Godwin, E. Egeru, A. Gidudu, A. Bamutaze, Y. Kabenge, I. Asiimwe, R. (2023) 'Determinants of households' flood risk coping strategies in a high exposure system of the Manafwa catchment and Lake Kyoga Basin', *Water Policy*, 25(2016). Available at: http://dx.doi.org/10.2166/wp.2023.231

Lugoi, L. Bamutaze, Y. Martinsen, V. Almås, A.R. (2023) 'Climate change hotpots and their implications on rain-fed cropping system in a tropical environment', *Applied Geography*, 154(3). Available at: http://dx.doi.org/10.1016/j.apgeog.2023.102953

Palliyaguru, M.P.G.N.M. Navaratne, C.M. Wickramasinghe, D.D. Nanayakkara, C.M. (2023) 'Investigation of Impact of Phosphate Fertilizer Applied to Paddy Fields on Water Quality of Nearby Reservoirs', *International Journal of Current Science Research and Review*, 6(4): 2438-2442. Available at: https://ijcsrr.org/single-view/?id=10000&pid=9853

Palmer, C. Tanner, J. Akanmu, J. Alamirew, T. Bamutaze, Y. Banadda, N. Cleaver, F. Faye, S. Kabenge, I. Kane, A. Longe, E. Nobert, J. Nsengimana, V. Speight, V. Weston, S. Winter, K. Woldu, Z. (2023) 'The Adaptive Systemic Approach: Catalysing more just and sustainable outcomes from sustainability and natural resources development research', *River Research and Applications*. Available at: https://doi.org/10.1002/rra.4178

Rahman, M.M. Tanni, K.N. Roy, T. Islam, M.R. Rumi, M.A.A.R. Sakib, M.S. Quader, M.A. Bhuiyan, N-U-I. Shobuj, I.A. Rahman, A.S. Haque, M.I. Faruk, F. Tahsan, F. Rahman, F. Alam, E. Islam, A.R.M.T. (2023) 'Knowledge, Attitude and Practices Towards Dengue Fever Among Slum Dwellers: A Case Study in Dhaka City, Bangladesh', *International Journal of Public Health*. Available at: https://doi.org/10.3389/ijph.2023.1605364

Ray-Bennett, N.S., Clarke, K., and Mendez, D. (2022) Sendai Framework's Global Targets A and B: Opinions from the Global Platform for Disaster Risk Reduction's Ignite Stage 2019. *International Journal for Disaster Risk Science* 13 (2022): 651-663 https://doi.org/10.1007/s13753-022-00432-3

Subroto, S. & Datta, R. (2023) 'Racialized Immigrant Community Perspectives on Climate Disasters Adaptability following 2030 UN Roadmap for Sustainable Development Goals (SDGs)', Sustainable Development. Available at: https://doiorg.libproxy.mtroyal.ca/10.1002/sd.2676

Veettil, B.K. Wickramasinghe, D. Amakaroon, V. (2023) 'Mangrove forests in Sri Lanka: An updated review on distribution, diversity, current state of research and future perspectives', *Regional Studies in Marine Science*, 62. Available at: https://doi.org/10.1016/j.rsma.2023.102932

Books

Wickramasinghe, D. Prematilaka, L. Witharana, A. Halwatura, D. Perera, T. (2023) 'Cities and Climate Change: Responding to the Impacts of Water-Related Disasters in Sri Lanka'. In: Singh, A. (eds) International Handbook of Disaster Research: 1-23. Springer, Singapore. Available at: https://doi.org/10.1007/978-981-16-8800-3 190-1

Reports

Avoidable Deaths Network. (2022) *Implementing the Roadmap for a Caribbean First Responders Community*. UK and Japan: Avoidable Deaths Network Publication. Available at: https://www.avoidable-deaths.net/wp-content/uploads/2023/07/CCRF-Publishable.pdf

Ray-Bennett, N.S., MacLeod, L., Ghosh, A. and Shiroshita, H. (2023) *Proceedings: Launch of a Global Campaign: International Awareness Day for Avoidable Deaths.* UK and Japan: Avoidable Deaths Network Publication. Available at: https://iad4ad.avoidable-deaths.net/wp-content/uploads/2023/07/IAD4AD-Proceedings-published.pdf

Corsel, D. Ray-Bennett, N.S. Shiroshita, H. Jackson, P. Reilly, P. Dixon, S. Kanoshima, E. Takatorige, T. Kawaguchi, T. Hayashi, Y. Fu, S. (2023) 'What is Needed for Fostering Future Leaders of Risk, Crisis, Disaster and Development Management (RCDDM) in Higher Education Institutions', なにわ大阪研究 [Naniwa Osaka Study], 5: 17 – 44. Japan: Kansai University. Available at: http://doi.org/10.32286/00028304

Few, R., Omasete, J. Geere, J. and Ray-Bennett, N. (2023) *Climate change and drowning risk in Bangladesh and Tanzania and the implications for RNLI programmes*, DEV Reports and Policy Papers Series 24, The School of International Development, University of East Anglia, UK. Available at: https://www.avoidable-deaths.net/wp-content/uploads/2023/07/Climate-change-and-drowning-risk-January-2023.pdf

Khawaja, S. Choudhary, N.I. Manahil, A. Ray-Bennett, N.S. (2023) *Pakistan Floods 2022 Resource Paper*. UK and Japan: Avoidable Deaths Network Publication. Available at: https://www.avoidable-deaths.net/wp-content/uploads/2023/02/Pakistan-Floods-2022-Resource-Paper.pdf

Ray-Bennett, N.S. MacLeod, L. Biswas, I. Samuel, S.P. Shiroshita, H. and Glovinsky, S. (2023) Exploring the Feasibility and Value of Pioneering Partnerships to Reduce Avoidable Snakebite Deaths in India. UK and Japan: Avoidable Deaths Network Publication. Available at: https://www.avoidable-deaths.net/wp-content/uploads/2023/07/PROCEEDINGS-REPORT-publishable.pdf

Ray-Bennett, N.S. Shiroshita, H. (2023) *International Awareness Day for Avoidable Deaths (IAD4AD): Guidance for Campaigners*. UK and Japan: Avoidable Deaths Network Publication. Available at:

https://iad4ad.avoidable-deaths.net/wp-content/uploads/2023/02/IAD4AD_Guidance_for_Campaigners.pdf

Shiroshita, H. Fujino K. (2023) 'Workshop Exploring Unconscious Disaster Risk Reduction Activities Embedded in Living Practice: A Case Study in the City of Izumiotsu, Japan', なにわ 大阪研究 [Naniwa Osaka Study], 5: 1 – 15. Japan: Kansai University. Available at: https://doi.org/10.32286/00028303

Leaflets

Ghosh, A.and Ray-Bennett, N.S. (2023) *Reducing Avoidable Deaths Amongst Children*. UK and Japan: Avoidable Deaths Network Publication. Available at: https://www.avoidable-deaths.net/wp-content/uploads/2023/07/Reducing-Avoidable-Drowning-Deaths-Amongst-Children.pdf

Yildiz, A. (2023) *Turkey-Syria Earthquake Appeal*. UK and Japan: Avoidable Deaths Network Publication. Available at: https://www.avoidable-deaths.net/wp-content/uploads/2023/02/Turkey-Syria-Earthquake-Appeal-Where-to-Donate.pdf

Posters

Ray-Bennett, N. MacLeod, L. Andrew, P. (2022) *Avoidable Deaths Network's Achievements and Highlights January – December 2022.* UK and Japan: Avoidable Deaths Network Publication. Available at: https://www.avoidable-deaths.net/wp-content/uploads/2023/07/2022-Achievements-1.jpg

Ghosh, A. Avoidable Deaths Network. (2022) *7 Steps to Prevent Snakebites*. UK and Japan: Avoidable Deaths Network Publication. Available at: https://www.avoidable-deaths.net/wp-content/uploads/2022/10/Arkoneil-Snakebites-Final-768x1086.png

Conferences, Seminars, Workshops and Presentations

Invited keynote addresses/lectures/speeches

- Dr. Nibedita Ray-Bennett delivered four key note speeches: i) 'Avoidable Deaths and Avoidable Disasters Deaths: A brief introduction' for the Pakistan Academy of Sciences Sindh Chapter, International Center for Chemical and Biological Sciences and Sindh Innovation Research, and Education Network (17 October 2022); ii) 'International Awareness Day for Avoidable Deaths: Purpose and Goals' (Texpia Osaka, Kansai University, 13 March 2023) ii) 'Disaster Deaths are Avoidable Deaths' at Dhaka University and YAS Centre for Health and Environment, YAS Hospital, Oman (18 June and 25 June 2023, respectively).
- Dr. Nibedita Ray-Bennett delivered a lecture on 'Sexual and Reproductive Health (SRH) Rights in Disasters' at the Crime, (In)Justice, Human Rights 2023 Summer School, organised by the School of Criminology, University of Leicester, 6 June 2023.
- Dr. Hideyuki Shiroshita delivered a lecture on 'What is "learning" about "Disaster Risk Reduction?" using some examples of recent disasters' at AY2022 Kameoka City Sawayaka Seminar, organised by Kameoka city education board, Galleria Kameoka, 1 September 2022.
- Dr. Hideyuki Shiroshita delivered a lecture on 'Utilising life embedded Disaster Reduction Activities' at Kishiwada Kenrou Daigaku, organised by NPO Kishiwada Kenrou Daigaku, Kishiwada Kenrou Daigaku, 15 November 2022.
- Dr. Hideyuki Shiroshita delivered a lecture on 'Revisiting Education for DRR' at AY 2022 Risk management and build back better, organised by The Iwate Higher Education Consortium, MALIOS, 03 December 2022.
- Dr. Hideyuki Shiroshita delivered a lecture on 'What is needed for learning about DRR' at Lecture series of Inamura no hi, organised by Hamaguchi goryo Archives- Tsunami Educational Centre, Hamaguchi Goryo Archives- Tsunami Educational Center, 04 March 2023.
- Dr. Hideyuki Shiroshita delivered a lecture on 'Preparing for the expected earthquake and tsunami' at public lecture, organised by NPO Kishiwada Kenrou Daigaku, Hannan City Cultural Centre, 20 May 2023.
- Dr. Hideyuki Shiroshita delivered a lecture on 'Designing DRR education for unlearning' at Social Communication Leader Training, organised by ACCD University Consortium, Kansai University Umeda Campus, 29 July 2023.

Press, Media and Impact

Between 1 August 2022 and 31 July 2023, ADN has been featured in 25 press articles and two televised interviews. The outreach is c 1.5 million people.

Press

City News. (2022) 'Need for disaster resilience health infrastructure highlighted', City News. Available at: https://citynews.com.pk/2022/10/17/need-for-disaster-resilience-health-infrastructure-highlighted/

Dawn. (2022) 'Flood victims vulnerable to suicidal tendencies, moot told', Dawn. Available at: https://www.dawn.com/news/1715540/flood-victims-vulnerable-to-suicidal-tendencies-moot-told

Dharitri Bhubaneswar. (2023) [Awareness is what can prevent snakebite disasters], *Dharitri Bhubaneswar*.

Ghosh, A. (2023) [What to do with snakebites, application to bring to school], *Dainik Savera Ludhiana city edition.*

Hama Elementary School. (2023) '3 月 1 3 日 [March 13] International Awareness Day For Avoidable Deaths', *Hama Elementary School*. Available at: https://izumiotsu.schoolweb.ne.jp/weblog/index.php?id=2710023&no=1

Jeevey Pakistan. (2022)

ڈاکٹر پنجوانی سینٹرجامعہ کراچی میں سیمینار سے نیشنل ڈیزاسٹر رسک مینجمنٹ فنڈ کے سی ای او ڈاکٹر پنجوانی سینٹرجامعہ کراچی میں سیمینار سے نیشنل ڈیزاسٹر رسک مینجمنٹ فنڈ کے سی ای او ڈاکٹر کا خطاب [Dr. Panjwani Center, CEO of National Disaster Risk Management Fund from a seminar at University of Karachi Address by Bilal Anwar], Jeevey Pakistan. Available at https://jeeveypakistan.com/archives/199140

Jomo News. (2023) '関西大学が「回避可能な死の国際啓発デー」を開催 [Kansai University Holds International Awareness Day for Avoidable Deaths]', *Jomo News*. Available at: https://www.jomo-news.co.jp/articles/-/250933

Kansai University. (2023) '回避可能な死のネットワーク「回避可能な死の国際啓発デー」 [Avoidable Deaths Network's International Day for Avoidable Deaths]', *Kansai University*. Available at: https://www.kansai-u.ac.jp/ja/about/pr/events_calendar/2023/03/post_70174.html

Web Bosai Joho News. (2023) '3月12日は「回避可能な死の国際啓発デー」 [March 12th is the International Day for Avoidable Deaths]', *Web Bosai Joho News*. Available at: <a href="https://www.bosaijoho.net/2023/04/14/3%E6%9C%8812%E6%97%A5%E3%81%AF%E3%80%8C%E5%9B%9E%E9%81%BF%E5%8F%AF%E8%83%BD%E3%81%AA%E6%AD%BB%E3%81%AE%E5%9B%BD%E9%9A%9B%E5%95%93%E7%99%BA%E3%83%87%E3%83%BC%E3%80%8D/

Kurian, V. (2023) 'India to be focus of global campaign to prevent snakebite deaths', *The Hindu Business Line*. Available at: https://www.thehindubusinessline.com/news/science/india-to-be-focus-of-global-campaign-to-prevent-snakebite-deaths/article66586549.ece

Mahabharata. (2023) 'ସାପର ମୃତ୍ୟୁକୁ ରୋକିବା ପାଇଁ ଜନସଚେତନତା ଆବଶ୍ୟକ' [Public awareness is needed to prevent snakebite deaths], *Mahabharata*. Available at: https://mahabharataepaper.com/epaper/m/67654/6493af5416b8f

Odisha Bharta. (2023) 'Avoidable Snakebite Deaths', *Odisha Bharta*. Available at: https://odishabarta.com/avoidable-snakebite-deaths/

Pradhan, H. (2023) 'Global campaign inspired by Odisha's disaster mgmt', *The Times of India*.

Available at: https://epaper.timesgroup.com/digital-article-share?article=12 03 2023 006 003 toikc TOI Times Nation

Prathihary, S. (2023) 'Avoidable Deaths: Snakes and Snakebites', Big Wire. Available at: https://bigwire.in/2023/05/23/avoidable-deaths-snakes-and-snakebites/

Prathihary, S. (2023) 'Snakebites: An Unheard Public Health Crisis', Big Wire. Available at: https://bigwire.in/2023/05/30/snakebites-an-unheard-public-health-crisis/

Ray-Bennett, N.S. Caley, T. (2023) 'Turkey-Syria earthquakes: Reducing avoidable indirect deaths'. Available online at: https://www.downtoearth.org.in/blog/natural-disasters/turkey-syria-earthquakes-reducing-avoidable-indirect-deaths-87703

Ray-Bennett, N.S. Caley, T. Samuel, S.P. (2023) 'Right anti-venom, given on time, can reduce snakebite deaths in India', *Down to Earth*. Available at: https://www.downtoearth.org.in/test/blog/right-anti-venom-given-on-time-can-reduce-snakebite-deaths-in-india-88507

Ray-Bennett, N.S. Sahoo, M. (2022) 'Odisha carries a huge burden of snakebite deaths — but it is avoidable', *Down To Earth*. Available at: https://www.downtoearth.org.in/blog/wildlife-biodiversity/odisha-carries-a-huge-burden-of-snakebite-deaths-but-it-is-avoidable-84787

Rout, M. (2023) 'ଦେଶରେ ବାର୍ଷିକ ୧ଲକ୍ଷ ୪୦ ହଜାର ଲୋକ ସର୍ପାଘାତର ଶିକାର' [1 lakh 40 thousand people are victims of snake bites in the country every year], *Argus News.* Available at: https://argusnews.in/article/odisha/1-lakh-40-thousand-people-are-victims-of-snake-bites-in-the-country-every-year

SAMAA (2022) 'موسم کے موافق صحت کی نگہداشت کا بنیادی ڈھانچہ ناگزیر ہے، ماہرین صحت'[A climate-friendly healthcare infrastructure is essential, health experts say], SAMAA. Available at: https://www.samaa.tv/news/40009309/

Samajaina. (2023) 'ବୈଷୟିକ ପଦକ୍ଷେପ ଓ ଜନ ସଚେତନତା ହିଁ ରୋକିବ ସର୍ପାଘାତ ଜନିତ ମୃତ୍ୟୁ' [Only medical measures and public awareness can prevent snakebite deaths], *Samajaina*. Available at: https://argusnews.in/article/odisha/1-lakh-40-thousand-people-are-victims-of-snake-bites-in-the-country-every-year

Sarbasadharan. (2023) 'ବୈଷୟିକ ପଦକ୍ଷେପ ଓ ଜନ ସଚେତନତା ହିଁ ରୋକିବ ସର୍ପାଘାତ ଜନିତ ମୃତ୍ୟୁ' [Only medical measures and public awareness can prevent snakebite deaths], *Sarbasadharan*.

TEJ Odisha. (2023) 'ବୁରୁଝୁରୀ ରେ ଓସୱା ଏଡିନ୍ ପକ୍ଷରୁ ସର୍ପ ଦଂଶନ ନେଇ ସର୍ଭେ ll [Survey on snakebites by ADN-OSVSWA in Burujjuri Village]', *TEJ Odisha*.

United Nations Office for Disaster Risk Reduction. (2022) 'Exploring the Feasibility and Value of a Regional Network for First Responders (RN4FR) in the Caribbean Region', *Highlights, United Nations Office for Disaster Risk Reduction (UNDRR) Sendai Framework for Disaster Risk Reduction 2015-2030 Voluntary Commitments*. Available at: https://sendaicommitments.undrr.org/highlights/133#highlight-views-top-area

United Nations Office for Disaster Risk Reduction. (2023) 'International Awareness Day for Avoidable Deaths on March 12', *Highlights, United Nations Office for Disaster Risk Reduction (UNDRR) Sendai Framework for Disaster Risk Reduction 2015-2030 Voluntary Commitments*. Available at: https://sendaicommitments.undrr.org/highlights/147

University of Leicester. (2023) 'University of Leicester co-launches International Awareness Day for Avoidable Deaths', *University of Leicester*. Available at: https://le.ac.uk/news/2023/march/avoidable-deaths

Media

Argus News. (2023) 'ସର୍ପ ଦଂଶନ ଜନିତ ମୃତ୍ୟୁ ଦୂରୀକରଣ ନେଇ ଆରୟ ହୋଇଛି ଆଲୋଚନାଚକ୍ର' [A seminar has been started on elimination of death due to snake bites], *Argus News*. Available at: https://fb.watch/ITtLNgcYEL/?mibextid=YCRy0i

TEJ Odisha. (2023) 'ବୁରୁଝୁରୀରେ ଓସଭାଣ୍ୱା ଏଡିନ୍ ନାମକ ଏକ ଆନ୍ତର୍ଜାତୀୟ ସଂସ୍ଥା ପକ୍ଷରୁ ସର୍ପ ଦଂଶନକୁ ନେଇ ସର୍ଭେ [A survey on snakebite conducted in Burujhari village by OSVSWA and ADN, an international organization]', TEJ Odisha. Available at: https://www.facebook.com/watch/?mibextid=rS40aB7S9Ucbxw6v&v=649754113675728

Annex 1: List of our Organisational Partners

Date of Joining	Name	Country	
12 March 2019	India	All India Disaster Mitigation Institute	
12 March 2019	India	Orissa State Volunteers and Social Workers Association	
12 March 2019	Egypt, India and Myanmar	MARS Practitioners Network: Mainstreaming Adaptation, Resilience and Sustainability into Development and daily life	
12 March 2019	Belize	Right Insights	
12 March 2019	Thailand	Equal Asia Foundation	
19 March 2019	India	Doers	
5 April 2019	Uganda	Africa Disaster Reduction Research and Emergency Missions [ADRREM] (Uganda)	
2 May 2019	Uganda	Transformative Projects Services Ltd	
8 November 2019	Bangladesh	Data Management Aid	
18 December 2019	India	Resilience Innovation Knowledge Academy	
26 December 2019	India	Confederation of Risk Reduction Professionals	
14 January 2020	Belize	Right Insights	
28 September 2020	Uganda	SAF (Shine Africa Foundation)-Teso	
19 November 2020	Pakistan	Center for Disaster Management, University of Management and Technology	
1 December 2020	India	Alchemist Research and Data Analysis	
13 January 2021	Nigeria	Disaster Alert	
22 January 2021	India	Pearlss 4 Development	
5 February 2021	Nigeria	Decapolis Community Development Centers	
10 December 2021	Austria	Disaster Management, Advice and Training (DMAT) Consulting KG	
10 December 2021	Germany	Prepared International (PPI)	
12 March 2022	India	Project DEFY- DISPECS (Disaster Prepared Community Spaces)	

Annex 2: Testimonials of Future Leader Interns

Dr. Nimra Iqbal Choudhary: 'I am a medical graduate and a student of Masters in Public Health program at Auckland University of Technology. My focus as a social activist is on improving the healthcare delivery service during disasters, particularly for the vulnerable population, including women and children. Realising the huge capacity deficit in this important field, I have conducted training and knowledge-exchange events.

Having initially joined ADN as a Future Leader Intern in April 2022, I was able to explore my interest in reducing avoidable disaster deaths which are avoidable. In October 2022, I conducted a national seminar on "Building Climate Resilient Infrastructure: Post Disaster Scenario in Pakistan" in the context of the devastating floods in Pakistan which impacted over 36 million people, damaged healthcare infrastructure, and thus caused a failure of healthcare service delivery. I was able to connect ADN with leading organisations in Pakistan such as Pakistan Academy of Sciences, International Center for Chemical and Biological Sciences, and National Disaster Risk Management Fund. The speakers included renowned health professionals, government officials, and media personnel. This major event was attended by 150 participants from 9 countries and highlighted the disaster preparedness in terms of climate resilient healthcare infrastructure as the key element of healthcare delivery system in disaster prone Pakistan, the fifth most populated country of the world. The event received a wide media coverage by leading newspapers and TV channels.

Through organising this event, I developed the skills required to become a Knowledge Exchange Public Engagement Coordinator at ADN. Earlier this year, I arranged a hybrid workshop on "Building Capacity of Health Journalists on Reporting Human-Made Disasters" in Pakistan, in context of reporting health emergencies in both natural and human-induced disasters. Additionally, I was actively involved in organising the Special Session Webinar series "Women's Stories of Survival, Innovation, Resilience and Development" which featured three sessions which aimed to capture women's stories of survival, innovation, resilience and sustainability in exceptional circumstances such as political crisis, climate-related disasters, human-induced resource scarcity. It has been a great learning experience so far and looking forward to many more!"

Ms. Kelly N. Litsoung: 'During my six-month internship at Avoidable Deaths Network from February to August 2023, I had an amazing learning experience, especially in the realm of meeting organization and management. It was truly eye-opening to see how much effort goes into making both online and in-person meetings successful. From gathering information from speakers to coordinating discussions and addressing participants' questions and concerns, there was a lot to handle. Working closely with the remarkable team members, Nimra, Nimisha, and Lauren, on the Special Sessions of Women's Stories allowed me to develop valuable skills in organization, time management, and collaborative teamwork.

Being part of the Network's Special Session Webinar series on Women's Stories of Survival, Innovation, Resilience, and Development allowed me to hear directly from these courageous women and gain a more profound perspective on disasters. Their stories vividly showcased the impact of wars and climate change-induced floods, leaving me even more motivated to

understand people's stories and contribute to finding solutions for their challenges. I also got a chance to proofread the Caribbean region's RN4FR Master document, which improved my writing skills.

The internship has been an essential part of my personal and professional growth, giving me valuable insights into crisis management and disaster response. It has been an enriching experience that has shaped my passion for making a positive impact in the world. Throughout the internship, the atmosphere at Avoidable Deaths Network was warm and welcoming. The team was friendly and always ready to help, making the learning process enjoyable and rewarding. Their support and guidance gave me the confidence to take on new tasks and step out of my comfort zone, and I feel a strong sense of belonging and camaraderie within the team. This internship has been a valuable steppingstone in my journey towards becoming a more effective and compassionate professional'.