REPORT OF 30-HOUR SKILL TRAINING PROGRAMME

ADITI MAHAVIDYALAYA, UNIVERSITY OF DELHI

ACKNOWLEDGMENT

Indian adolescents (10-19 years) and young adults (16-24 years) have the fifth-highest average age in the world (10-24 years). It is critical to invest in this generation to benefit from the nation's demographic dividend. However, increased disasters and climate change risk has put everyone at risk. However, adolescent females are at higher risk during disasters and emergencies. Consequently, we need to push for more gender-sensitive DRR and prepare them as partners in preparedness. Especially women who are often side-lined must be equipped to provide assistance and protect their loved ones. We must not undervalue the great amount of energy the young girl possesses, nor their potential to come up with gender-centric ideas. In this context, colleges and universities should proactively participate in gender-centric disaster risk reduction and response. This 30-hours Skill Training programme in collaboration Aditi Mahavidyalaya, University of Delhi has helped students feel empowered, capable, and confident in their abilities to respond quickly and appropriately in the event of an emergency.

At the outset, I would like to express our sincere thanks to the honourable Mr. Rajender Singh, Member, NDMA and Prof. Santosh Kumar, NIDM, Government of India, Prof. Rajni Abbi, Chairperson, Governing Body, Aditi Mahavidyalaya, Dr. Nitin Malik, Registrar, Ambedkar University. I also thank the imminent speakers, Dr. Sanjay Kumar Tomar, Deputy Chief Fire Officer, Delhi Fire Service, Ms. Tanushree Verma, Head (Training and Research), Zone4Solutions, Dr. Itinderpal Singh Bali, Master Trainer (First Aid), Dr. Sangita Pant, Senior Manager (Training and Capacity Building), Kailash Satyarthi, Children's, Dr. Awdhesh Kumar, Asst. Professor, Invertis University, India, Ms. Risha Sayyad, Advocate, Kailash Satyarthi Children Foundation, Ms. Sadaf Farooq, Program Coordinator (Training & Capacity Building) Kailash Satyarthi Children's Foundation, Mr. Arup Dhar, Senior Community Disaster Response Volunteer, ATDRVA, Ms. Chaya Panada, Global Career Counsellor, Dr. Indrajeet Singh and Mr Naresh Master Trainers, Zone4Solutions for enriching technical sessions.

It gives me immense pleasure in acknowledging your cooperation and I extend my gratitude to, Prof. Mamta Sharma, Principal, Aditi Mahavidyalaya, Prof. Sadhna Jain, Aditi Mahavidyalaya, Mr. Baldev Gulati, Dr. Suruchi Singh, Dr. Santosh Yadav, Dr. Rashmi Gupta members of Skill Development Committee and Ms. Tanushree Verma, Head (Training and Research), Zone4Solutions who meticulously organized the training programme. I would also like to thank the participants and the supporting staff as without them it would not have been possible to organize the training programme.

Mr. Nakul Kumar Tarun
Director, Zone4solutions

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1. INTRODUCTION AND BACKGROUND

1.1 RATIONALE FOR THE TRAINING

A disaster occurs when a community's usual functioning is disrupted unexpectedly and severely, resulting in human, economic, physical, livelihood, and environmental losses and consequences that exceed the community's ability to cope (UNISDR, 2009). On the other hand, Disaster Risk Reduction (DRR) is the concept and practice of reducing disaster risks through systematic efforts to analyse and manage disaster causal factors, such as reduced exposure to hazards, proactive approach to people and property vulnerability reduction, smart land and environmental management, and improved preparedness for adverse events (UNISDR, 2009).

However, we often ignore women and girls during disaster planning and responses. The gender-specific behaviour makes women and girls susceptible to underlined risks. The social, economic, ethnic, cultural, biological, and environmental factors not only affect the disaster response and recovery but their coping strategies and their participation in the disaster management cycle. We have also witnessed that during COVID-19 Lockdowns domestic violence, child marriage, cybercrime, and girl trafficking were the issues women faced.

Though, it is not that women's safety and empowerment have been overlooked throughout the years; the latest global forums and Indian government has made it a priority concern to close the gender gap.

International Interventions	
Sustainable Development Goal (2015-2030)	Goal 5: Gender Equality
Sendai Framework for Disaster Risk Reduction (2015-2030)	Implementation of gender-sensitive policies, plans and programs regarding the reduction of disaster-risk
Convention on the Elimination of All Forms of Discrimination against Women	General Recommendation 34: States parties should address specific threats posed to rural women by climate change, natural disasters, land and soil degradation, water pollution, droughts, floods, desertification, pesticides and agrochemicals, extractive industries, monocultures, biopiracy and the loss of biodiversity, in particular agro-biodiversity.
National Interventions	
India's National Disaster Management Guidelines (2007)	Development of State Disaster Management Plans, emphasis on women participation in disaster planning and identify them as first responders
India's National Policy on Disaster Management (2009)	Distinguishes the vulnerability of women and other socio-economic vulnerable groups and mandates the social inclusion in State Disaster Response Forces to provide support in CBDRR, and charges state with providing for the "permanent" restoration of livelihoods for female-headed households, among other marginalized and vulnerable groups.
PM's Ten Pont Agenda	Point 3: Encourage gender involvement and leadership of women in disaster risk management

	Point 6: Develop a network of universities to work on disaster-related issues Point 8: Build on local capacity and initiative to enhance disaster risk reduction
73rd and 74th Amendment (PRI)	33% of women participation in PRI

However apart from leadership, women require enough skill development training to properly respond to emergencies and this should be initiated in schools and universities. Education and skill development for disaster risk reduction can be included in the curriculum. Not only would this boost the youth involvement process by acting as facilitators, mentors, trainers, or leaders, but it will also provide women more opportunities to serve as first responders.

1.2 Broad And Specific Objective Of The Training

This 30-hours skill development training programme is intended for students/ teachers/professors of Aditi Mahavidhaya to help build their knowledge, skills and perspectives towards disaster management and emergency response. This will help the concerned stakeholders understand and prepare for emergency. In this sense, the course will shed light on:

- The Disaster Management Institutionalization in India
- Identify and list the activities to protect the children and their rights.
- Disaster Management Phases, HRVC assessment
- Fire Safety
- Leadership of Youth for DRR
- Women issues during COVID-19
- Emergency transportation techniques
- Basic First aid
- Non-structural and structural risks, mitigation
- Carrer Opportunities after graduation including secretariate services.

1.3 Training Method And Techniques

Most skill development programme followed classroom led-delivery as well as digital platform. Life-saving skill and emergency response such as first aid and search & rescue were also demonstrated in the college campus. An assessment was held on May 06, 2022 for all 60 participating students and certificates got distributed to those who successfully completed the programme (Annexure 12.4).

2. ORIENTATION PROGRAMME

Prof. Sadhna Jain opened the event by warmly welcoming the distinguished speakers, guests, and students. In her address, she highlighted that the increased intensity of disasters is influencing us in various dimensions. For effective preparedness and response, community knowledge must be built. In this regard, the Aditi Mahavidyalaya, University of Delhi has begun a 30-hour skill training programme that includes

Figure 1: Prof. Jain moderating the programme

- Fundamental life-saving skills,
- Knowledge of disaster management and risk reduction,
- Emergency Response: Search and Rescue
- Leadership in Management
- Role of youth in Disaster Management

2.1 WELCOME ADDRESS: PROF. MAMTA SHARMA, PRINCIPAL, ADITI MAHAVIDYALAYA

Figure 2: Prof. Sharma addressing the audience

- Dr Sharma appreciated the compliment of the gathering on the orientation-cum-inaugural programme of short-term course of skill-building training on emergency and disaster management.
- She emphasised that disasters such as COVID-19, building fires, and natural disasters such as earthquakes and floods have resulted in property devastation, financial loss, and physical injury or disease. Loss of resources, security, and shelter access also results in population migration. Only organised community preparedness will be able to mitigate these effects. It may also be managed and prevented with good emergency management training.
- This arises the sense of responsibility that the universities and colleges should train the concerned students/teachers and non-teaching staff with life-saving skills along with theoretical knowledge of emergency response and preparedness. She highlighted that preparedness is the only way to minimize the impacts of disasters and encouraged that the course will lay the foundation for the holistic development of the students which is the essence of National Education Policy 2020.
- She emphasised that short-term courses on relevant topics such as disaster management, climate change adaptation, disaster risk reduction, and skill development not only offer us the chance to learn but also enable us to contribute to addressing unpredictable disasters. She further stated that the training will enlighten the students on several career opportunities in the realm of disaster management.

2.2 SPECIAL ADDRESS: MR RAJENDRA SINGH, MEMBER, NDMA

- Mr Singh highlighted that due to its geographical location and topography, India is prone to various hazards like floods, earthquakes, drought, landslides, avalanches, cyclones, and tsunamis. Therefore, India needs a pool of trained professionals for preparedness, response, recovery, rehabilitation and capacity building. The 30-hour skill training programme will lay the foundation for such an initiative.

Figure 3: Mr. Singh addressing the audience

- He stressed that the disaster has resulted in physical, economic, infrastructure, human, and environmental losses. This is caused due to lack of awareness of emergency response, early warning and monitoring among the societal institutions and community. As a result, disaster preparedness and response require certain abilities to analyse, mitigate, and respond to such devastation and increase the capabilities of the community to withstand the adviser consequences of the disaster.
- He appreciated the efforts of the colleges to sensitize the students and faculty about disaster readiness and life-saving skills. He also mentioned that NIDM has been collaboratively working with different universities across India to create a culture of preparedness and emergency response, mitigation, effective communication and experience sharing.
- He also mentioned that COVID-19 Pandemic has shed light on the importance of life-saving skills, medical and para-medical skills along with effective communication and collaboration skills.
- He also stressed the significance of disaster risk-informed education to build young capacity. For instance, South Africa has 600 volunteers who assist approx. 24600 households in a month and 316, 800 in a year.
- He acknowledged the commitment of youth through volunteerism through the NCC, NSS, and NYKS (6 crore volunteers). Mr Singh highlighted the Aapda Mitra Scheme, an initiative by NDMA that aims to provide the community volunteers with the necessary skills that might be required to help the community during and after post-disaster.
- Mr Singh mentioned that the Aapda Mitra scheme was implemented in 350 districts (districts prone to flood, earthquake, cyclones and landslides) and planning to add 100, 000 more volunteers under the initiative in upcoming years. These volunteers are selected at the district level and will be trained by NDRF and other emergency service providers to build a local pool of trained emergency responders.
- He urged that the aspiring students participating in the programme should later seek professional training and become the prime ambassadors of the college, locality for disaster risk-informed preparedness.

2.3 KEYNOTE ADDRESS: PROF. SANTOSH KUMAR, NIDM

- Prof. Kumar initiated the address by highlighting the aim of the training programme i.e., an effective response we need knowledge and appropriate capabilities as emergencies are often

sudden and have causative events (power supply disruption, lack of emergency supplies, etc) needing an immediate response.

Figure 4: Prof. Kumar addressing the audience

- He highlighted that to build the capacities of universities and colleges, NIDM has signed MoU with 95 universities along with developing the curriculum for engineering, medical and UGC universities.
- Prof. Kumar also encouraged that is a need for national guidelines, policies and schemes to integrate disaster risk-informed education into our education system to address the existing and future emergencies will appropriate skills.
- Prof. Kumar appreciated the efforts of the university and highlighted the proactive role of women's leadership and participation in disaster preparedness.
- While highlighting the efforts taken by Miranda House, University of Delhi to develop the Disaster Management Plan, Prof. Kumar emphasised the importance of youth and associated institutions' engagement in innovative and sustainable sound practices, as well as the emergence of new career opportunities in this sector.

2.4 DISASTER RISK REDUCTION AND ROLE OF UNIVERSITY: DR. NITIN MALIK, REGISTRAR, AMBEDKAR UNIVERSITY

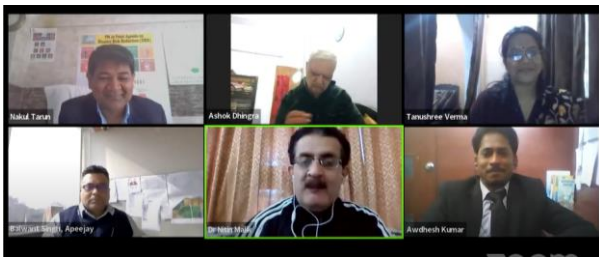


Figure 5: Dr. Malik addressing the audience

- Dr. Malik remarked on the need for collaborative actions from government, universities and students for Disaster Management and DRR education. Disaster education as a core course and career field can only be recognized when schools and universities offer students professional certificate courses.
- He emphasised that New Education Policy 2020, PM Ten-Point Agenda and India's motto of Atmanirbhar bharat underlining the need for skill development (through training and practice) for emergencies and disasters as one of the central concerns.
- The term 'management' is used extensively in disaster management. Every phase of disaster management, recovery, preparedness, and mitigation requires management abilities. As a result, universities and institutions should aim to provide disaster management certificates, undergraduate, postgraduate, PG diplomas, and research degrees as part of our educational system.
- Younger generations are the transformational leaders in their communities. As a result, it's critical to provide kids with the tools they need to explore and master these crucial life skills. Incorporating this into the curriculum will help instil compassion, accountability, and empathy for those who are harmed or vulnerable along with making them. more resilient.

- Lastly, he added that by including disaster management in school, college, and university curricula, educated young will be better prepared to deal with emergencies by having the knowledge, self-confidence, and survival skills to deal with them in less time. Student awareness will aid in the development of a better, sustainable, and more resilient nation.

2.5 Overview of skill-building in the DM programme: Mr. Nakul Kumar Tarun, Director, Zone4Solutions

- Mr. Tarun warmly welcomed the esteemed guests, speakers and students and highlighted that it a high time to prepare each section of the society as due to climate change the magnitude, frequency and intensity of the hydrometeorological disasters like floods, tsunamis and landslides are increasing.

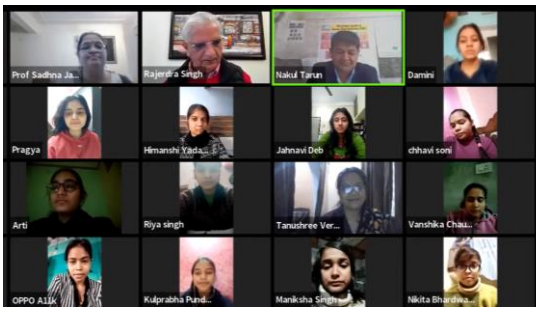


Figure 6: Mr. Tarun addressing the students

- He added that the government are obligated to protect its citizen but the government can't reach everyone. Thus, community preparedness and resilience are the only way to effective emergency response. And trained students and educators can become community warriors in times of emergency with appropriate skills and knowledge.
- He highlighted that a wide variety of traumatic events can impact students, including automobile accidents, sports-related injuries or classroom mishaps. Therefore, it is essential to develop student induced emergency preparedness to make students resilient.
- Lastly, he emphasises that being prepared saves lives. The course will equip the students with skills to analyse life-threatening situations and act accordingly. The course covers the aspects of disaster risks, hazards, vulnerabilities, capacities as well as response principles, safety and emergency communication.

2.6 Role of youth in DRR: Mr. Awadesh Kumar, Associate Professor, Invertis University

- Mr. Kumar initiated the discussion while highlighting that India is vulnerable to various disasters and emergencies due to its geophysical location, and demographic and socio-economic profile. Therefore, disaster management and community-based DRR should become one of the core areas of academic interventions.

Figure 7: Mr. Kumar addressing the audience

- He added that the target-oriented, updated short terms courses on disaster management and emergency response will not only provide theoretical insights but also practical knowledge on the relevant topics.

- He also discussed the need for institutionalization of youth lead space encompassing capacity building, policy advocacy, youth action and knowledge because youth can be recognized as an asset for disaster prevention and reducing vulnerabilities in two folds:
  - Recognizing that youth have assets; and
  - Recognizing that youth collectively can be an asset to development at local, regional, national, and international levels.
- The fact that disasters are collaboratively affecting each region of the globe and the threats are real is no longer a surprise for the youth. Therefore, recognizing them as victims misses the vast potential of their unique and collective capacities to drive solutions. They can take action to reduce disaster risks at colleges, at home and in their communities as recognized by NDMA. Rural youth can play a pivotal role in developing a distinct DM strategy through awareness generation, mapping the risks and vulnerabilities, developing preparedness mechanisms, etc.
- He also focuses on the distinct PM 10 Point Agenda for DRR, pointing out Agenda 6 i.e., develop a network of universities to work on disaster issues as they have social responsibilities. He also mentioned that IUINDRR-NIDM was created specifically to support this cause.
- Additionally, Mr. Kumar discussed strategies to motivate youth to take climate change action and ways to engage in disaster risk reduction. This includes engagement of youth in all phases of DM, natural resource management at the regional level, establishing institutional linkages to promote youth engagement, use of IT, communication technology and media to promote and connect volunteers, setting up a youth technical advisory board, strengthening the network of private organizations, NGOs and CSOs to promote volunteerism.
- Furthermore, he discussed four approaches for youth DRR education such as online, offline campaigns, E-learning; participatory learning for vulnerability and capacity assessments, DM planning, implementing the risk reduction measures, monitoring plans at organizational, community and household levels; informal education to establish social and behavioural change, and formal university-level interventions including school DM plan, the conceptualization of DM, DRR and climate change in the school curriculum etc to support and develop capacity within the existing public education systems
- Additionally, Mr. Kumar discussed strategies to integrate youth inclusive DRR such as:
  - Advocate relevant departments to integrate DRR/CCA education in schools and universities;
  - Organised youth meet activities at university and community level;
  - Design extracurricular activities on DRR topics; integrate DRR/CCA concepts in the core subjects;
  - Promote young perspective Peer exchange forum discussion and media to integrate innovative ideas on DRR;
  - Train young clubs and AR and emergency response;
  - Motivate youth to conduct campaigns on community-based actions to protect our environment, energy-saving, life-saving skills and inclusiveness; and
  - Promote youth and community participation in DRR/CCA planning.

2.7 KEY HIGHLIGHTS

Ms. Tanushree Verma, Head (Training and Research), Zone4Solutionshighlighted that it is essential to divert the young energy to emergency response skill development which is the core of the 30 hours skill training programme.

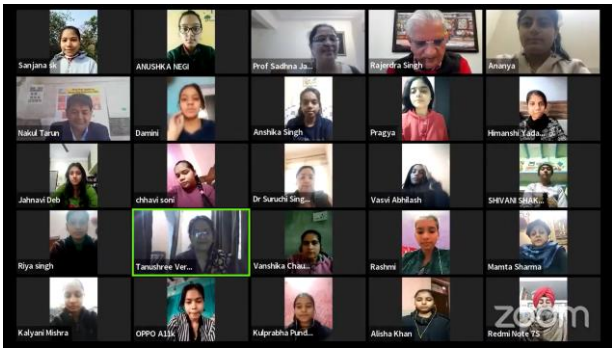


Figure 8: Ms. Verma Summarizing the programme

She emphasised that a disaster-resilient community is one that is risk-aware and prepared for disasters, which can only be accomplished when every part of the society is well-informed and trained in avoiding risks and threats.

She also highlighted the need for women-inclusive DRR and emergency response. In this light, she mentioned that the course ensures that integration of the PM's 10- Point Agenda for DRR i.e. Women's leadership and greater involvement should be central to disaster risk management (Point 3) and Build on local capacity and initiative to enhance disaster risk reduction (point 8) to create a pool of trained women volunteers for effective emergency preparedness and response.

2.8 Q& A

A question was asked concerning disaster management at the school level. On this, Mr. Kumar stated that disasters are events which harm the community and are beyond their coping capacities, and disaster management aims to prepare communities and schools for each potential risk, danger ranging from floods to snake bites. This is documented in form of a school disaster management plan.

Another concern was arisen on how the course will enhance the entrepreneurship of the students. On this, Mr. Kumar remarked that the course aims to enhance emergency response skills. He stated that these life-saving skills will improve one's confidence, and ability to be self-reliant which are the core features of an entrepreneur. He explained using Zone4Solutions as an example which has set Disaster Management as a core organization sector as a means of livelihood and emergency service provider.

A student raised a query that why some sections of society are more vulnerable to disasters. On this, Ms. Verma enlighten the participants that it is important to understand the vulnerabilities of all the sections of society. We need to find the gaps and fill these gaps with our enhanced skills and knowledge to save ourselves from the adverse consequences of disasters and emergencies.

2.9 VOTE OF THANKS

Ms. Suruchi Singh, Short Term Courses Committee, Convenor extended her gratitude to the presenters, guests, Zone4Solutions and students for their vital contributions, underlining the fact that India's youth are its face and stressing the need for young engagement in long-term DRR programmes. She hoped that the 30-hour skill training programme will provide a platform for the students to understand the basic concepts of disaster management and emergency response.

Figure 9: Ms. Singh submitting the Vote of Thanks

2.10 RECOMMENDATIONS

Provide 2-Grade Elective Credit Courses/ Professional Certification Short-term courses on Disaster Management and Basic skills for emergencies at the schools and university levels.

Develop a short-term course curriculum on skill training and disaster management for colleges around the country to educate students about disaster preparedness.

3. TRAINING PROGRAMME: DAY 1

Date	Topic to be covered	Mentor
February 20, 2022	Fire Safety in Buildings	Dr. Sanjay Kumar Tomar Deputy Chief Fire Officer, Delhi Fire Service
	Institutionalization of Disaster Management in India	Mr. Nakul Kumar Tarun Director, Zone4Solutions
	Observers: Mr. Baldev Gulati, and Dr. Suruchi Singh Skill Development Committee, Aditi Mahavidyalaya	

SESSION 1: FIRE SAFETY IN BUILDINGS

Presenter: Dr. Sanjay Kumar Tomar, Deputy Chief Fire Officer, Delhi Fire Service

Key Takeaways

- Fire is required for various purposes such as cooking, transportation, and source of electricity, especially in industries. However, uncontrollable fire can cause mass devastation and loss of lives. Therefore, it is essential to understand the measures of fire safety, fire prevention, and fire protection to prevent and protect.

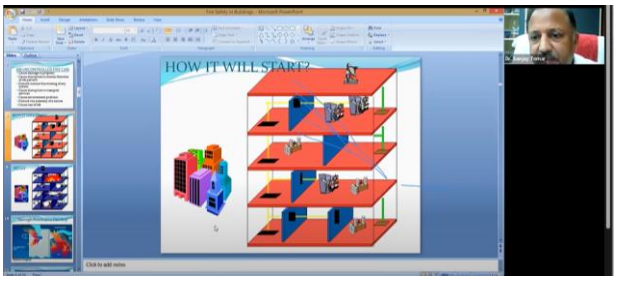


Figure 10: Dr. Tomar highlighting the fire spread in building

- Dr. Tomar defined fire as the combustion of fuel (can be solid, liquid or gases) after reaching a certain temperature (in presence of oxygen) level releasing heat, light etc. He also explained the three modes of heat transfer i.e., conduction, convection and radiation through which the fire heat spreads to large areas in a given amount of time.
- Dr. Tomar highlighted the characteristics of the fire i.e., disturbance to the normal functioning of the affected population; systems; transportation; environment; economy.
- He also explained how fireworks reach many layers/floors through penetration. To prevent such events, it is essential to have vertical and horizontal compartments which break the integrity and the fuel supply. He also emphasised the relation between metal and fire where fire can diminish the holding capacity of the metals.
- He shared the instances of Shrey Hospital, Ahmadabad (2020), Vijay Vallabh Hospital, Virar, Hotel Arpit Place, Karol Bagh (2019), to explain that each outlet, the building should provide training on fire safety and prevention to save as many lives as possible, especially the critical infrastructure because they become the pillar of safety during and post emergencies.
- To prevent fire incidents, one needs to study and analyse the following:
  - Analysis of the cause of fire/ source of ignition
  - Analyse the factors contributing to the growth of the fire
  - Analyse the behaviour audition material in case of fire to identify fire resilient materials

- While discussing fire safety in the building, Dr. Tomar explained that fire and life safety has two components as shown in figure 11.
- He discussed that building design should be so that in the event to fire the occupants including differently-abled people children and the elderly can either remain in place, or evacuate without being subjected to the hazardous, unhealthy and untenable environment.
- Additionally, Dr. Tomar highlighted the requirements of:

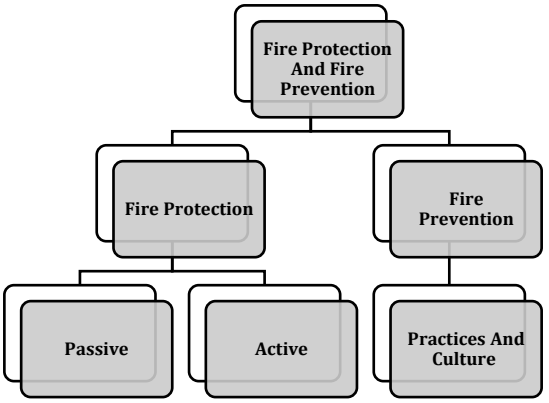


Figure 11: Fire Prevention and Protection

- **Open space around the building**- road width, approach, gate width, open space on all sides, turning circles, weight-bearing capacities;
- **Exists**- sufficient to permit safe exist of all the occupants, properly illuminated, free from obstruction and arranged that they may be reached without passing through another occupied unit;
- **Number and size of exists**- The number of exists should be based on occupant load, travel distance, the height of the building;
- **Compartmentation**- to restrict the spread of fire, fire compartment walls and compartment floors made of fire-resisting constructions should be developed.
- **Smoke control**- smoke detectors, smoke exhaust systems or pressurization systems with supply air systems for existing access corridors should be required
- **Service Shafts and Ducts**- sealed ducts/shafts along with an open vent at the top of the shaft should also be there.
  - He also discussed the fire protection means and measures such as Fire Extinguisher, hose reel, wet riser, dry riser, downcomer systems, yard hydrant, Automatic Sprinklers, Manual Operated electric fire alarm.
  - Dr. Tomar emphasised a balanced approach to fire safety as shown in figure 12. He stated that safety can be ensured only when one is alert and think about the next action carefully.

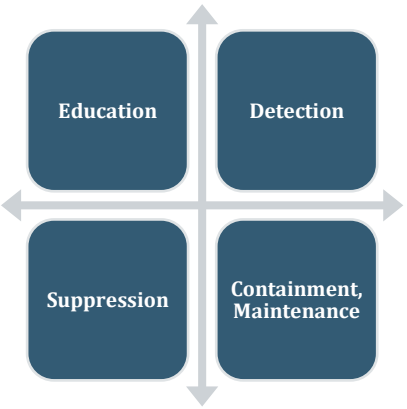


Figure 12: A balanced approach to fire safety

  - The session also enlightens students about the fire safety plan encompassing:
    - **Identify the hazards**- such as faulty plug sockets, damaged kitchen appliances, obstructed ventilation
    - **Consider who is at risk**- People who are not familiar with the building layout, the elderly, children, PwDs, etc.
    - **Determine what measures are needed and apply them**- better housekeeping to move sources of fire and combustible material away from fire escape routes

- **Review and Update**- Over time new hazards appear and control measures become less effective so reassess risks, reapply control measures and rerecord details.
- **Appoint fire warden**- Appoint a competent person to take charge of fire safety, prevention ad evacuation procedures in the building. The fire warden along with the occupants must receive technical and practical safety training regularly.
- **Arrange maintenance and repairs**- Depute a team to check and maintain equipment and carry out repairs for instance fire doors, emergency lighting, firefighting equipment, kitchen appliances, plug sockets, fire alarm, etc.
- **Training**- Training on life-saving skills, hazard prevention methods, operating firefighting equipment and emergency response should be provided to the building occupants.
- **Plan fire routes**- Escape routes that enable anyone to reach a safe place, even if fire blocks one of the escape paths should be designed and tested regularly during training. Not all education strategies are suitable for every building. Therefore, building oriented fire evaluation strategies should be developed and stimulated.

Figure 13: Dr. Tomar introducing firefighting device

- While discussing the fire preventive measures, Dr. Tomar highlighted that:
  - No combustible material of any kind shall be allowed to accumulate in the buildings.
  - Electrical cables and wires shall be laid and concealed as per the designed electrical load.
  - All electrical apparatus used shall be conforming to Indian and International standards.
  - Prohibition on smoking and the use of naked light should be enforced.
- Lastly, he added that prevention is better than cure. One should always try to avoid fire events but if caught up in one, we should try to strict it and save lives as many as possible.

Questions and Answers

What to do in LPG leakage?	Remove the regulator from the gas cylinder. The inbuilt cylinder valves close themselves as soon as the regulator is removed and stop the leak. This is the best way to stop gas cylinder leakage. Open the windows and doors to allow the gas to dissipate, call the emergency number and report the situation. He also enlightens the students about the emergency number that one can call if the gas is leaking.
What to do to prevent electric fire in electricity meters at home?	Usually, electricity meters are placed outside the house. However, the main concern is to prevent combustion by separating the ignition material from the source. He also highlighted that water is a good conductor of electricity, therefore, we should not use water to put on an electric fire.

How to prevent fire events in unauthorised colonies?	Preparedness is better than prevention and response. Therefore, community awareness and training with community participation on causes of fire and emergency response is the only solution to prevent fire events in such dwellings. These colonies have loose wiring, buildings constructed with combustible material therefore, it is also important to make the community aware of replacing combustible material with non-combustible.

SESSION 2: INSTITUTIONALIZATION OF DISASTER MANAGEMENT IN INDIA

Presenter: Mr. Nakul Kumar Tarun, Director, Zone4Solutions

Key Takeaways

- Mr. Tarun initiated the discussion while defining Disaster Management as a process that effectively prepares for and responds to disasters, catastrophes and emergencies. It includes preparedness, mitigation, prevention, response and recovery as phases involving pre, during and post-disaster action strategies.

Figure 14: Mr. Tarun addressing the students

- He emphasised that the DM Act, of 2005 laid the foundation of disaster management in India (after experiencing Bhuj Earthquake and Odisha Super Cyclone) and introduced the National Disaster Management Authority (NDMA), State Disaster Management Authority (SDMA), District Disaster Management Authority (DDMA), National Institute of Disaster Management (NIDM), National Disaster Response Force (NDRF), etc. to plan and execute the disaster preparedness, relief, rehabilitation, reconstruction initiatives. He explained the roles and responsibilities of each authority at all levels.
- While discussing the National Policy on Disaster Management, Mr. Tarun highlighted that the goal of the National Policy on Disaster Management is to foster a culture of prevention, preparedness, and resilience at all levels via knowledge, innovation, and education. Furthermore, it stressed the necessity of community-based DM, which requires last-mile policy, plan, and execution integration, as well as all-around capacity building.

Vote of Thanks

At the end of the day, Mr. Tarun summarized the session highlighting that prevention is better than cure but preparedness is better than prevention and response. Therefore, it is essential to understand the fire risks and how to mitigate them timely along with effective evacuation. He extended his gratitude to the presenters, and audience for their vital contributions and stated that it is important to have knowledge, skills and attitudes to prepare efficiently to prevent and tackle any minor fire emergencies.

4. TRAINING PROGRAMME: DAY 2

Date	Topic to be covered	Mentor
February 25, 2022	Understanding Hazard Vulnerability and Risks Conceptual understanding and vulnerability profile of the country	Ms. Tanushree Verma Head (Training and Research), Zone4Solutions
	First Medical Responder in Disaster	Dr. Itinderpal Singh Bali, Master Trainer
	Observers: Dr. Suruchi Singh and Dr. Rashmi Gupta, Skill Development Committee, Aditi Mahavidyalaya	

SESSION 1: UNDERSTANDING HAZARD VULNERABILITY AND RISKS

Presenter: Ms. Tanushree Verma, Head (Training and Research), Zone4Solutions

Key Takeaways

- Ms. Verma introduced the theme of educational institutes and DRR in the session by providing fact that educational institutions are the agents of change in the society and have thus the capacity to mobilize skilled and experienced communities when needed. She also highlighted the PM 10-point Agenda for DRR (Point 6), a call for educational institutes and university networking for disaster management and DRR.

Figure 15: Ms. Verma addressing the students

- She defined disasters as catastrophic events that homogenously impact the potentially affected population which is beyond their coping capacity and needs external aid to normalize life. She interactively explains the hazard risk function while explaining the terms hazard, vulnerability, risk, and capacities. A hazard is a physical event which is potent to turn into a disaster if not coped with effectively. A risk is a possibility that someone could be harmed by a hazard. Whereas vulnerability will be exposed to attack or harm and is determined by physical, social, attitudinal and economic conditions, and environmental situations. She explained capabilities as the ability to fight against the adverse impacts of the disaster/ emergency. For instance, in terms of the COVID-19 pandemic, the COVID-19 vaccination drives all over the world have increased communities' physiological coping capacities against the coronavirus.

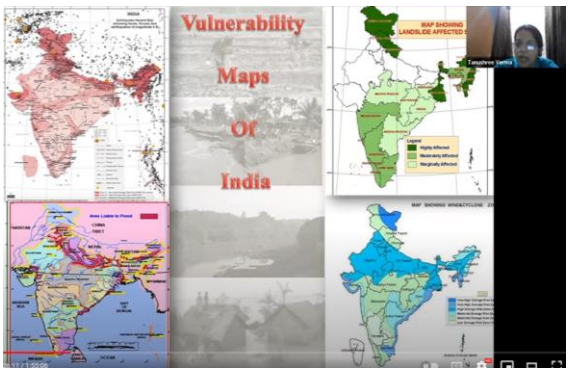


Figure 16: Vulnerabilities of India

- She highlighted that our differential vulnerability and coping capabilities define our risks towards emergencies and disasters. Therefore, it is important to determine:
  - To what threat or hazards are we vulnerable?

    - What makes us vulnerable to that threat or hazard?
- Government though is obligated to provide citizen safety; however, it cannot reach to the last mile. Therefore, to mitigate the hazard risks, we need to increase community coping capacities while reducing the vulnerabilities. This can be done:
- At governance level: Increased risk communication governance, risk-reducing policies, capacity building training schemes, plans and programmes, need-based emergency response and preparedness planning.
- At the regional level: Risk mitigating disaster management plans, capacity development policies and strategies, strengthening community dependency on natural resources with Eco-DRR.
- At the individual level: Hazard risk, and vulnerability differs from person to person. Therefore, it is important to strengthen individual capacities through awareness campaigns and life skill education and training, especially in vulnerable sections such as children, women, the elderly, and PwDs.
- Ms. Verma also highlighted the vulnerability profile of India stating that India is the land of various disasters such as floods, earthquakes, cyclones, tsunamis, landslides, and avalanches due to its geographical location. Additionally, vulnerability to Nuclear, Biological and Chemical disasters, pandemics as well as terrorism, has also increased in recent times.
- Furthermore, she explained the disaster management cycle comprising mitigation, prevention, response and recovery. She emphasised that preparedness is an essential part of the cycle as for effective response community-based preparedness is essential which will minimize the recovery phase and allow the community to rebuild more quickly and sustainably.
- She highlighted that community is the first responder, therefore it is important to have self-reliant community. To have a prepared and safe community, she introduced initiatives like:
    - Generating awareness within the community
    - Following disaster resilient building construction
    - Formation of Disaster Management Plans under the supervision of qualified disaster managers
    - Training on DM and lifesaving skills
    - Mock drills to test the effectiveness of knowledge and skills.

SESSION 2: FIRST MEDICAL RESPONDER IN DISASTER

Presenter: Dr. Itinderpal Singh Bali, Master Trainer

Key Takeaway

- Dr. Singh defined first aid as the forest responder the witness provides to the victim during emergencies before medical help is available. It is an important initial step for providing an effective response that helps in reducing serious injuries and increasing the chances of survival. Thus, first aid training provides invaluable lifesaving skills and brings the confidence to provide first aid during a real emergency. The prime purpose of first aid is as follows:
    - Preserve life
    - Prevent further deterioration
    - Promote Recovery.

- He also introduced the **Golden hour** i.e., the first 60 minutes of the care the victim receives. It is very important especially in cases of traumatic injuries as this golden hour plays an important role in deciding the morbidity and mortality of the victim.

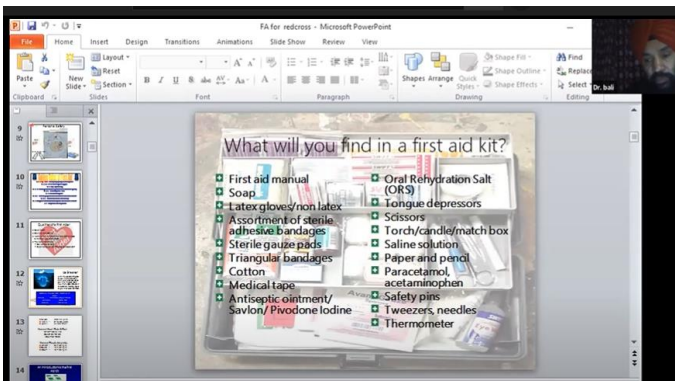


Figure 17: Content of First Aid Kit

- Dr. Singh emphasized the role of the First aid responder is very crucial. Therefore, one needs to ensure his/her safety first before looking after the victim. However, if one cannot provide aid to the injured:
  - Inform the concerned authority- police and emergency services.
  - Secure the area and the causality.
  - Monitor the casualty and understand what went wrong
- Comfort the victim. He also explained that, if we cannot provide aid to the injured: we should inform the concerned authority- police and emergency services, to secure the area and the causality, monitor the casualty and understand what went wrong and comfort the casualty. He also supported Universal Precaution and Hygiene to keep the risk of infection at a minimum.
- The first step to the safety of all is the **Scene Survey**. He stated that as a First aid responders, our safety always comes first. Before we help the ill or injured person, determine that the scene is safe.
- Dr. Singh provided insights on actions to be taken for different casualties. Initially, he explained the **casualty assessmen**t i.e., evaluating the sick or injured person. It determines if the ill or injured person: is conscious; has open and unobstructed breathing: Situations, where consciousness or breathing are abnormal, are often life-threatening. Hence, check if the airway is clear to ensure breathing and circulation: is breathing (check the heartbeat), look at the positioning of the; is bleeding or not (look for the injury, if any); Bleeding and spinal injuries can also be life-threatening.

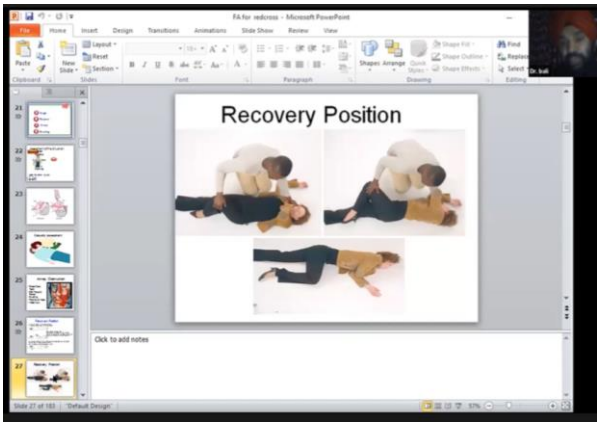


Figure 18: Recovery Position

- The next step he explained was to **seek help**. It is best to call Emergency services like Ambulance, fire brigade, police (EMS) or further help, if not done during the primary assessment.
- Furthermore, he explained how to provide first aid and check the response (check the casualty's consciousness) by asking the name from the distance, if the casualty doesn't respond, then move closer and tap/shake/pinch the casualty. This includes observing

breathing (ABC: Airway, Breathing, Circulation) for Cardiopulmonary Resuscitation (CPR) and positioning the person in the Recovery position.

- Aftermath he explained how to respond to injury-related emergencies:

INJURY	WHAT TO DO	HOW TO DO
Bleeding	• Individual may help if he feels comfortable • Shout or call for help • Ask the person to sit or lay down on the floor • Try to stop the bleeding by applying pressure or by applying tourniquet.	Stop the bleeding by pressing with both the hands on the wound. If possible, ask the person to press himself on the site of injury. If the bleeding has stopped, cover the wound with a clean cotton cloth and wrap a bandage around the wound. Seek for medical advice at the earliest.
Wounds, cuts and bruises	Abrasion Laceration Puncture Avulsion Incisions	• Allow the wound to bleed freely and clean itself out, unless there has been a large loss of blood or the blood is squirting out, in which case you need to apply pressure to stop the bleeding. • Try to stop or slow down the bleeding. • Apply pressure on the wound with a clean cloth or bandage. • Rinse out the wound with clean water. • Apply clean dressing. • After an injury that causes a break in the skin or after an operation, various wound infections may occur. The wound may be red, tender, painful or produce pus.
Fractures	• Look for the symptoms: • Pain, swelling, bruising • discoloured skin around the affected area • angulation – the affected area may be bent at an unusual angle	• If there is bleeding from the wound, stop the bleeding by putting direct pressure on the wound. • Cover the wound thereafter with a clean cotton cloth. Suggest the person suffering from to support the injured part (e.g., a broken arm) himself or ask a bystander to do so. • Immobilize the injured part with a bandage/splint; try not to move the injured part whilst doing so.
Burn	SCALD assessment of a burn Size Cause Age Location Depth	• Protect the burned person from further harm. For electrical burns, make sure the power source is off before you approach the burned person. • Make certain that the person burned is breathing. • Cover the area of the burn. Bandage the burn. Wrap it loosely to avoid putting pressure on burned skin.

Amputation	• Help only when you feel comfortable. • Shout or call for help. • Minimize contact with the person's blood. • Try to control bleeding and secure the wounded area with a piece of gauze.	• Control the bleeding by providing direct pressure on the wound. • Put a clean cloth bandage on the wound. Wrap or cover the injured area. Raise the injured part above the injured person's heart. • Apply steady, direct pressure to the wound. If there's an object in the wound, apply pressure around it, not directly over it. • Place the amputated part in an ice container. • Mark the package with the name of the injured person and send it along to the hospital

Head Injuries	• Observe the following:
	  ○ Concussion
	  ○ Scalp wounds
	  ○ Bruising and swelling behind the ear(s)
	  ○ Skull fractures
	• Assure the casualty and explain the situation, if possible.
	• Check the casualty's airway, breathing and circulation.
		• Assess the casualty's condition.
		• Stop any bleeding by firmly pressing a clean cloth on the wound. If the injury is serious, be careful not to move the head. If blood soaks through the cloth, do not remove it. Place another cloth over the first one.
		• Do not pack the ear or nose. Place a light dressing on the ear
		• If conscious and breathing, make him lie him down in recovery position.

Sanke Bites	Signs or symptoms associated with a snake bite may vary depending on the type of snake, • Puncture marks at the wound • Redness, swelling, bruising, bleeding, or blistering around the bite • Severe pain and tenderness at the site of the bite • Nausea, vomiting, or diarrhea • Heavy breathing • Rapid heart rate, weak pulse, low blood pressure • Disturbed vision	• Cover your hands with gloves or clean plastic bag. Try not to come into contact with the person's blood • Cover the wound with a clean cloth. Put a firm bandage on the wound of the injured limb. • If he becomes unconscious but is still breathing, put him in the recovery position. • Always wash your hands after giving care

Vote of Thanks

At the end of the day, Ms. Verma summarized the session and thanked the trainer and students of their participation.

5. TRAINING PROGRAMME: DAY 3

Date	Topic to be covered	Mentor
February 27, 2022	Tool and techniques of Hazard Risk Vulnerability assessment	Ms. Tanushree Verma Head (Training and Research), Zone4Solutions
	Search and rescue	Dr. Itinderpal Singh Bali, Master Trainer
	Observers: Dr. Santosh Yadav and Dr. Suruchi Singh, Skill Development Committee, Aditi Mahavidyalaya	

SESSION 1: TOOL AND TECHNIQUES OF HAZARD RISK VULNERABILITY ASSESSMENT

Presenter: Ms. Tanushree Verma, Head (Training and Research), Zone4Solutions

Key Takeaways

- Ms. Verma initiated the session by introducing the current status of disaster management in India, the DM Act (2005) and the DM policy (2019) which highlights the paradigmatic shift from emergency response to effective preparedness, mitigation and prevention and adapting to new challenges such as COVID-19 as a continuous and integrated process.

Figure 19: Ms. Verma addressing the students

- She introduced National Action Plan on Climate Change, Drought Manual, National Disaster Management Plan (2019), States and District Disaster Management Plans. She emphasised the formation of disaster management plans for different sectors, communities, and critical infrastructure as disasters affect each aspect of life and we need should have SoPs on what needs to be done, and when.
- Ms. Verma interactively discussed the it is important to understand the hazards, emergencies one is exposed to at community and school level which is called HRVC assessment. This step requires identifying the issues so that the DM plan can provide solutions to them. This includes hazard identification and response plan as two-component of it as shown in figure 20.

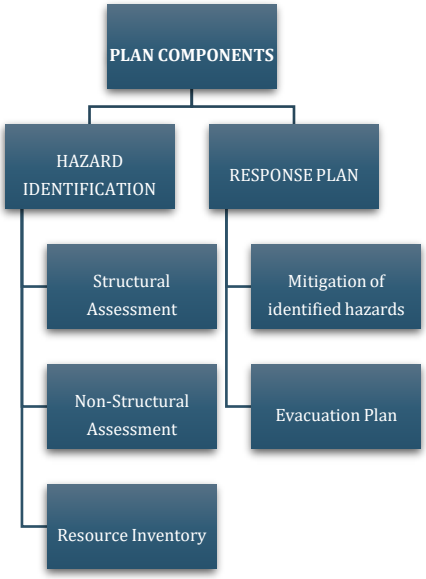


Figure 20: Steps on HRVC Assessment

- While explaining the process of HRVC assessment, she explained that it is an essential step to gather information through informal discussions for need assessment, planning, implementation, monitoring of programme, design disaster

management plan or any emergency strategy as it reflects the existing risks, vulnerabilities and capacities of the community.

- She explained about various tools of data collection as part of need assessment and planning.
- Ms. Verma discussed the diagrammatic techniques to represent the hazard analysis such as Seasonal and Historical Diagrams, seasonal calendars to estimate the occurrence seasonality of the hazards, and historical diagrams to understand the frequency of the hazard and risk ranking and scoring. This is a part of the step of Rapid Visual Screening (RVS) in which the team should interact with the locals to understand they community profile such as past hazards, the damage and loss, existing demographic units, etc.

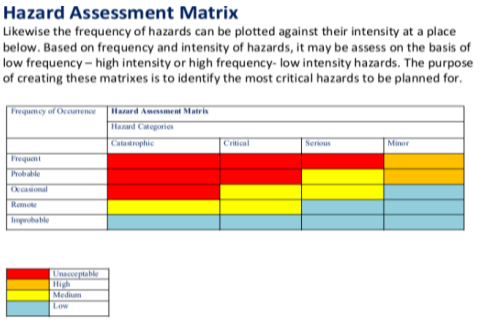


Figure 21: Presentation Slide: Hazard Assessment Matrix

- The second step is hazard hunting or hazard identification, in which the experts look for the potential hazards, the structural and non-structural risks, identify hazards within the vicinity and outside the vicinity and the history of previous emergencies with the intensity and area, identify the vulnerable spots and community. After understanding the potential hazards within the community, school building it is important to prioritize the hazard risks. It is essential to understand each identified hazard along with Frequency, Magnitude, Severity, and Risk Priority (Hazard Assessment Matrix, Venn Diagrams). She added that a Transact walk of the area is an essential part of the step.
- She explained that a hazard cannot do damage without vulnerability, and hence it is critical to assess vulnerability. Vulnerability represents the weakness of the community which can be attributed to its exposure by being located at a certain place to its various demographic, social and economic characteristics that enhance its likelihood to experience damage.
- In the school vulnerability assessment, the team needs to look at vulnerability through a structural and non-structural risk lens. Additionally, it is important to map the available resources of the community including human, technical, cooperative and financial resources as capacity assessment.
- She explained the formation of the DM teams (in accordance with the risks, impact and area to be affected) such as search and rescue, etc determining the roles and responsibilities, and the number of members required in each team. The next step she explained was the capacity building of these teams. She also highlighted that the testing process (stimulation- redrafting SOP-stimulation) is one of the essential elements to increasing the capacity of the community to a satisfactory level through regular mock drills.
- Lastly, she encouraged the students do perform such assessment for their community, schools and house to understand how vulnerable there are and what needs to be prepared.

SESSION 2: SEARCH AND RESCUE IN DISASTER

Presenter: Dr. Itinderpal Singh Bali, Master Trainer

Key Takeaway

Dr. Singh continued to explained the acute emergencies as follows:

INJURY	WHAT TO DO	HOW TO DO
Chest Pain	Always remember SHARP-PAIN: S – Sudden faintness or dizziness H – Hot profuse sweating A – Ashen skin and blueness of the skin R – Rapid irregular pulse P – Persistent vice like chest pain P – Pain increases and may not ease with rest A – Air hunger – extreme gasping for air I – Indigestion – discomfort high in the stomach N – Normal breathing lost (breathlessness)	• Make the person sit in a comfortable position. • Ask him to if he takes medicines, if he takes medication for his heart condition. If so, assist him to take the prescribed medication. • If Unconscious and breathing – Make him lie him down in recovery position. • If Unconscious and not breathing – Immediately, call for help
Fainting & Vertigo	• Make the person comfortable • Vertigo may often lead to fall, so make the person or lie down immediately. • Assess the level of consciousness	• Have the person lie down and ask him to rest. • Ask the person to avoid sudden changes in body position. • Help the person avoid abrupt head movements, especially looking up. • If the person is having nausea or vomiting, ask them to lie down in recovery position. • Always refer / take the person to nearest medical facility for proper care. • Vertigo and dizziness might be due to several illnesses hence definitive care is must.
Heat Stroke	Assist the person only if you feel comfortable. Observe the following: • Heavy sweating. • Paleness. • The casualty complains of muscle cramps. • The casualty complains of headache, dizziness, or tiredness. • The casualty may act confused. • Rapid, weakening pulse. • Fast, shallow breathing. Help the person suffering to move to a cool and shady place.	• Shift the person to a cool /shady place. • Hydrate the person and sponge his body with cool water. • Give oral fluids if the person is conscious and alert • Seek medical help
Hypothermia	Hypothermia symptoms for adults include:	• Make sure you are protected sufficiently against the cold, prior helping the other casualty.

	• Shivering, which may stop as hypothermia progresses • Slow, shallow breathing • Confusion and memory loss • Drowsiness or exhaustion • Slurred or mumbled speech • Loss of coordination, fumbling hands, stumbling steps • A slow, weak pulse	• Moving the person to a warm, dry place, if possible, or sheltering them from the elements • Removing wet clothing, cutting items away if necessary • Covering their whole body and head with blankets, leaving only the face clear • Putting the individual on a blanket to insulate them from the ground & monitoring breathing.

- Dr. Singh discussed search and rescue and its objectives like:
  - To rescue the survivors trapped
  - To provide first aid services to the injured survivors and dispatch them for medical care.
  - To take immediate necessary actions for temporary support and protection.
  - To hand over, recover and dispose of the bodies of the deceased
  - To train, demonstrate and raise awareness among the affected population and comfort them.

In this sense, the duty of the rescuer: Assessment, Information, Observation (Look, listen, Feel)

- He also emphasised teamwork and search and rescue are not an individual task, rescue is a team effort that needs coordination and planning and therefore, is focused on manpower, equipment, and methods.
- He introduced emergency transportation techniques such as:

SINGLE HELPER

Cradle Technique

Human Crutch Technique

Pick-A-Back Technique

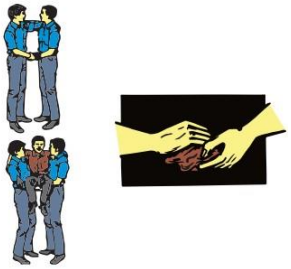
Fireman's Lift and Carry Technique

MULTIPLE HELPERS

Human Crutch Technique

Hand Set Technique

The Kitchen-Chair Carry Technique



Two-Handed Seat Technique

The Fore and Aft Method Technique

Blanket Lift Technique

Figure 22: Emergency Transportation Techniques

He also introduced few ropes and knot techniques as shown in figure 23.

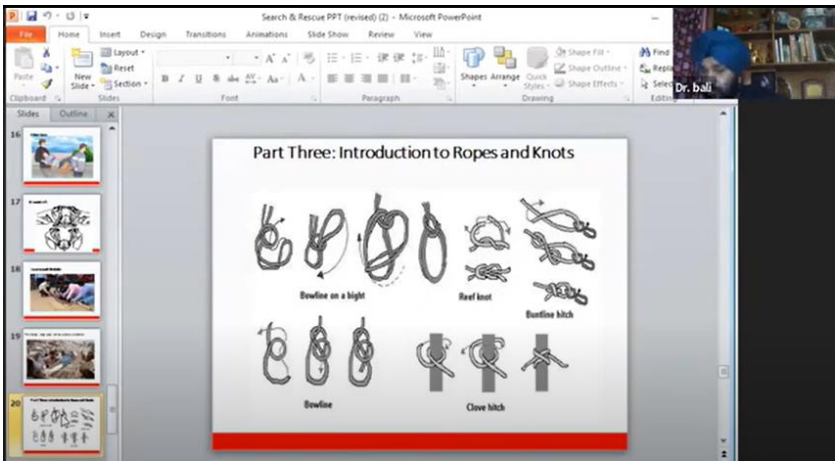


Figure 23: Different knots and roping techniques

- Dr. Singh emphasised on the roles and responsibilities of the volunteers during, per and post disasters:
  - Preparedness phase: Training, ensure availability of the resources, conduct risk assessments, arrange rescue kits.
  - During Disaster phase: Arrange search and rescue operation, prepare for evacuation, make arrangements for basic amenities.
  - Post Disaster phase: Comfort the affected population, provide basic amenities, provide first aid, organize reconstruction actions.

Question And Answers

How to make a District Vulnerability Profile?

Ms. Verma explained that the DDMA office holds the information about it, however, one can assess the community/locality using HRVC assessment tools and techniques introduced in the session.

Vote of Thanks

At the end of the day, Mr. Tarun summarized the session and thanked the trainer and students of their participation.

6. TRAINING PROGRAMME: DAY 4

Date	Topic to be covered	Mentor
March 02, 2022	Child Rights Issues and Challenges - during and post-disaster	Dr Sangita Pant Senior Manager (Training and Capacity Building), Kailash Satyarthi Children's
	Developing Leadership Quality in Youth	Mr. Awadesh Kumar, Associate Professor, Invertis University
	Observers: Dr. Santosh Yadav and Mr. Baldev Gulati, Skill Development Committee, Aditi Mahavidyalaya	

SESSION 1: CHILD RIGHTS ISSUES AND CHALLENGES - DURING AND POST-DISASTER

Presenter: Dr Sangita Pant, Senior Manager (Training and Capacity Building), Kailash Satyarthi, Children's

Key Takeaway

- Dr Pant introduced the term 'Child', a male/female/transgender who is below 18 years of any religion and socio-economic background. Children account for 38% of the Indian total population (470 million). Though we are called the young population but this population is vulnerable to exploitation, trafficking, labour, early marriage, discrimination, neglect, emotional abuse, sexual abuse, physical abuse.

Figure 24: Dr. Pant interacting with the students

- Children as considered as the property of their parents. However, other than Human rights, the rights of children are enshrined in:
  - Constitution of India, 1950: Right to free and compulsory elementary education, right to be protected from any hazardous employment till 14 years, right to equal opportunities and facilities to develop healthily, right to be protected from being trafficked and forced into bonded labour.
  - National Policy for Children, 1974
  - UN Convention on Rights of the child, 1989
  - National Policy for Children, 2013

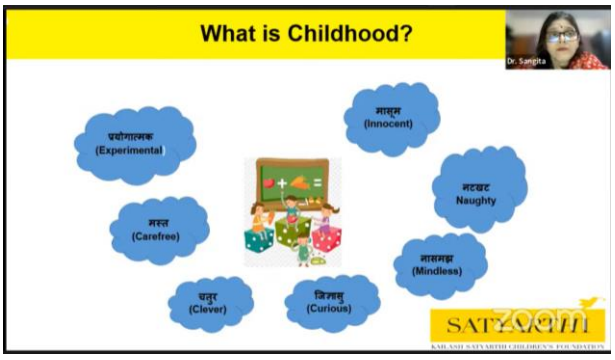


Figure 25: Presentation Slide: What is Childhood

  - Legislation to protect rights of children: The Children and Adolescent Labour (Prohibition and Regulation) Act, 1986; The Commission for Protection of Children Right Act, 2005; Prohibition of Children Marriage Act, 2006; The Rights for Children

to Free and Compulsory Education Act, 2009 The Juvenile Justice (Care and Protection of Children) Act, 2005; Protection of Children from Sexual Offences Act, 2012.

- The Kailash Satyarthi Children's Foundation conducted the study during the first lockdown which Reflected that the trafficking of adults and children have increased drastically during the Pandemic (March 2019- March 2020); Along with that the incidence of child labour and child marriages also increased because of lack of employment, basic amenities and migration; High School dropout rate especially girl child; witnessed domestic violence; debt bondage trap has extended drastically during the pandemic.
- Another study revealed that during the new normal the children became the victim of online abuse as they were not new to the technology. This makes the children more vulnerable to the sex perpetrators and thus child pornography was increased. Therefore, the Kailash Satyarthi Children's Foundation and Child Protection Fund conduct a study to understand the landscape of child sexual abuse material usage which revealed that the demand for child photography was on an average of 5 million per month 100 cities where data was available only on public and the child sexual abuse material were used by male whereas the demand was from across the age using VPN.
- The usage of child abuse material is not about the percentage of the people who have used but it needs to consider the number of children who are exploited in the process, violating their rights.
- Though, we always talk about the perpetrator usually the stranger in sexual abuse cases however in 90% of cases the perpetrators are family members. However, we have the Pocso Act, 2012 to deal with pornography and any kind of sexual abuse committed against children where the perpetrator can get the death penalty in severe cases such as rape. Juvenile Justice (Care and Protection of Children) Act, 2015 provided Sponsorship facilities for postal care facilities.
- Lastly, she concluded that stay-at-home requirements have contributed to a 'shadow pandemic' of gender-based violence affecting women and girls in particular, including child marriage, domestic sexual abuse, etc. These elements harm their mental health and psychological well-being. In summary, events like COVID-19 aggravated existing problems and generate new ones when it comes to psychosocial health and mental health.

SESSION 2: DEVELOPING LEADERSHIP QUALITY IN YOUTH

Presenter: Mr. Awadesh Kumar, Associate Professor, Invertis University

Key Takeaway

- Mr. Kumar initiated the discussion by giving a brief overview of disasters, classifying them, and defining DRR as the process of decreasing risk as much as feasible. He introduced the global international disaster resilience frameworks such as HFA (2005-2015), SFDRR 92015-2030) intended to accomplish a significant decrease in disaster risk and losses in lives, livelihoods, and health, as well as in the economic, physical, social, cultural, and environmental assets of individuals, enterprises, communities, and nations, during the time

period specified through capacity building, policy and advocacy, youth action and knowledge management; SDGs setting out a vision to combat poverty, hunger, disease and disasters (10 out of 17 goals are in the view with DRR).

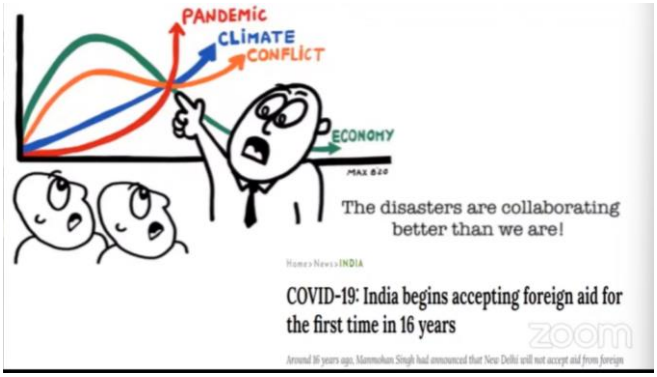


Figure 26: Presentation Slide: Disasters work better than us

- By shedding light on the statistics related to the youth population Mr. Kumar pointed out that according to different definitions of 'youth', India has the largest young population in the world. According to India's definition of young (15–30-year age group), youth population signifying 27% of the population; looking at China's definition of young (15–35-year age group), 35% of the young population contributes to the Indian population; and according to UN's definition of young (15–25-year age group), 18% of India's population is youth.
- He discussed the disaster management and DRR international frameworks such as Hyogo Framework for Action 2005-2015 (HFA), Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) and Sustainable Development Goals - 2030 (SDGs) and highlighted the actions taken in SFDRR and UNISDR Youth Engagement Platform to support and facilitate the meaningful involvement of youth in DRR policy design, implementation, monitoring and review at all levels.
- He also focuses on the distinct PM 10 Point Agenda for DRR, pointing out Agenda 6 i.e., develop a network of universities to work on disaster issues as they have social responsibilities. He also mentioned that IUINDRR-NIDM was created specifically to support this cause.
- During COVID-19, he emphasised the failure of the Indian education system to meet the needs of the most disadvantaged groups, where thousands of students are unable to get adequate knowledge and skills (linguistic issues, inaccessibility to technology, socio-economic issues) despite national-wide public-private efforts.
- In this sense, Mr. Kumar introduced the National Policy on Education, 1986 which recognized the role of NSS in serving the community:
    - Understanding the community
    - Identifying the needs, risks, problems of the community with community participation
    - Develop a sense of social and civil responsibility among youth
    - Develop competency among youth o support the community during emergencies
    - Acquire leadership qualities and demographic thoughts
- Lastly, he urged that our skilled youth are our strengths. They can promote resilience through their participation in community activities and by organizing youth groups. Furthermore, there is a need for a Disaster Mitigation and Management Cell to monitor and coordinate the line departments, equipped with infrastructure to provide simulative training to youth volunteers in DM.

Vote of Thanks

At the end of the day, Mr. Tarun summarized the session and thanked the speakers and students of their participation.

7. TRAINING PROGRAMME: DAY 5

Date	Topic to be covered	Mentor
March 06, 2022	Nonstructural safety issues in schools and sensitized to non-structural risk and how to mitigate	Ms. Tanushree Verma Head (Training and Research), Zone4Solutions
	Issues faced by women during COVID-19 Pandemic	Ms. Risha Sayyad, Advocate, Kailash Satyarthi Children foundation
	Observers: Dr. Rashmi Gupta and Mr. Baldev Gulati, Skill Development Committee, Aditi Mahavidyalaya	

Ms. Verma interactively recaptured the training programme where students were families with disaster management terminologies, disaster management in India, hazard vulnerability assessment, search and rescue during emergencies, fire safety and child rights. She also emphasised the importance of skills of first aid and leadership which are the most important to mobilize and save lives post-emergency.

She also highlighted the course evaluation method.

SESSION 1: TOOL AND TECHNIQUES OF HAZARD RISK VULNERABILITY ASSESSMENT

Presenter: Ms. Tanushree Verma, Head (Training and Research), Zone4Solutions

Key Takeaways

- She discussed the many categories of disasters, and introduced the disaster management cycle and elaborated on the phases of disaster management i.e., prevention and mitigation are to reduce the risk (through HRVC assessment, planning and strategic measures, capacity building), whereas response, rehabilitation and reconstruction are the phases aftermath of the disaster to provide relief and recovery from the impact of disasters.
- She highlighted the ALL-HAZARD approach which includes school safety efforts that can need to identify potential hazards including their structural and non-structural factors. She emphasises that the safety of students, teachers, staff and parents needs to be approached holistically to include visible as well as invisible risks.
- In this sense, risk reduction measures should be focused on:
  - Mitigation: Actions were taken to minimize the extent of a disaster
  - Preparedness: Actions are taken before a disaster strikes usually to forecast or warn and take precautions and arrange for a response
  - Response: Actions taken to provide immediate assistance to fill gaps in the community's capacities.
- She introduced the terms' structure and non-structural mitigation. While discussing structural measures, it was discussed that the structure of the building is very important to protect ourselves. Whereas non-structural measures will be what can be done inside the building to prevent loss and damage.

- She focused on non-structural risks such as loosely placed heavy objects, an infestation of the campus by pests, Broken walls and infrastructure, uneven flooring, blocked evacuation routes, poorly designed and placed furniture, inadequate sanitation facilities, etc.
- In this context, Ms. Verma
- highlighted a few non-structural mitigation measures that can be done the campus, such as:
    - relocate/ attach furnishing and contents such as almirahs, bookshelves, chemical utilities
    - clear corridors, doorways and exit paths,
    - place heavy items down low,
    - Secure objects that cab slide,
    - Behavioural change among users to develop a culture of safety
    - Secure fan, lights from ceiling
    - Fire Safety Audit, Electricity Safety Audit

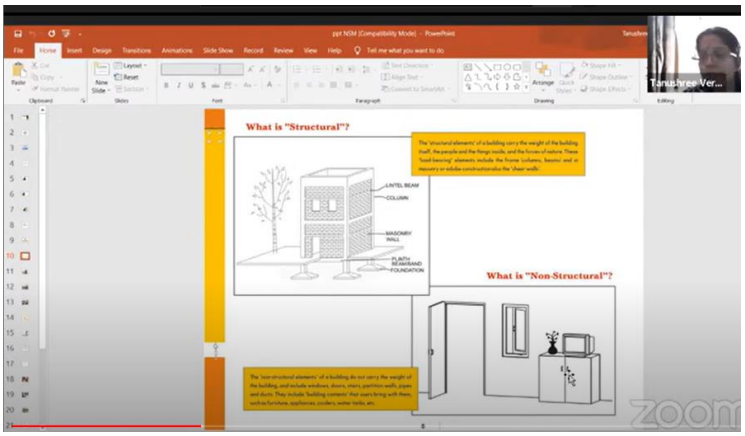


Figure 27: Structural and Non-structural risks

- While discussing the structural mitigation measures, Ms. Verma highlighted that the building should be constructed according to the National Building Codes and should be disaster resilient. For schools she stated:
    - Appropriately siting, design and dealing with structural safety in new schools and repairing existing ones.
    - Existing vulnerable schools need to be repaired to the desired level of resilience with regards to the local hazard risks
    - Vertical expansion if exiting schools shall not be carried out without a fitness certificate
    - Each classroom should have two doors for evacuation, adequate openings for ventilation, lighting, corridors and staircases with adequate width.
- Lastly, she empathised on training and capacity building as we are the victims and first responders and a prepared community is the safe community. In this reference, the community or school-based disaster management plan is developed with a qualified disaster manager.

SESSION 2: COVID 19 PANDEMIC- ISSUES AND CHALLENGES FACED BY WOMEN

Presenter: Ms. Risha Sayyad, Advocate, Kailash Satyarthi Children foundation

Key Takeaways

- Ms. Sayyad commenced the discussion with the fact that till the time we think of women as only survivors/victims of disasters, the effectiveness of DRR would be hampered. Their role as local leaders, decision-makers should be acknowledged.
- It is important to consider the conditions of women in an at-risk society. She asked to reflect and see if the girls and women of a particular society can answer questions related to their

freedom of speech, domestic violence, marriage and sexual abuse, then only they can determine their role in DRR. She considered this as an important and complex issue considering the socio-economic and psychological aspects.

- She added during major natural disasters women do not have technical knowledge about disaster occurrence, in general, thus, the participation of women in planning designing implementing and monitoring the emergency program and rehabilitation project is still on a low-key profile. The additional reasons for the same include:
  - Cultural constraints female mobility due to clothes and cultural norms
  - Lack of knowledge and skillsets such as swimming or climbing
  - Less physical strength than males due to prolonged nutritional deficiency
- COVID-19 has impacted the community socially, economically and psychologically. During the COVID-19 lockdown, a spike in domestic violence rates occurred all over the world as women were trapped at home with their abusers. Within the first few months of the pandemic, India saw an increase in cases of domestic violence, child marriage, cyber violence, and trafficking of women and girls. Surprisingly, the National Crime Records Bureau report, 2020 stated that the crime against women has been decreased from 405326 (2019) to 371503 (2020). The reason is that the perpetrator is residing in the same house (father, brother, friend or any relative) and women have no access to notify this due to consecutive lockdowns. Especially, Uttar Pradesh has the highest reporting of crimes followed by West Bengal, Maharashtra (states have dominating patriarchal society), whereas the highest rate of crime against women was noticed in Assam Odisha and Delhi.
- **National Intervention during COVID-19 for Women Protection**: She mentioned that due to increasing domestic violence and sexual abuse the government issued an advisory to all the nodal officer's period to women-oriented policy and law (Domestic Violence Act, Provision of Child Marriage Act, Prohibition of Dowry Act) to be available 24 hours to tackle these situations. The women's safety was insured by a few schemes such as:

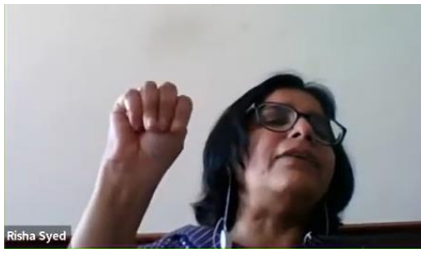


Figure 28: Signal for Help

One-stop Centre	Emergency Response and Rescue Services, Medical assistance, Assistance to women in lodging FIR /NCR/DIR, Psychosocial support/ counselling, Legal aid and counselling, Shelter, Video Conferencing Facility at the district level
Women helpline (181), women helpline by National Legal Services Authority (15100) for legal aid, WhatsApp numbers issued by National Commission for Women	
24-hour Women Shelter house	
Signal for help	A gesture an individual can use publicly or over a video call to alert others to their feeling of being threatened and needing assistance

- **Child Marriage during COVID-19**: In such a situation the Kailash Satyarthi Foundation with government officials, police are trying to generate awareness at the grassroots level about child marriage, women trafficking because a lot of times child marriage is a way to traffic a girl into exploitation (physical, sexual, removal of organs, servitude) or physical abuse. In addition to limited or no access to online education, lockdowns provided the perfect situation

in which the burden could be transferred to another family. Ms Sayyad introduced the interventions done by the Kailash Satyarthi Foundation which includes rescuing the trafficked children (rescued 1 lakh children since 1980).

- In this way, it became crucial to make the community aware of women's economic empowerment since economic empowerment will not only increase their incomes but also have positive impacts on their families, communities, and countries.
- The efforts are done by women and girl children to raise voices against exploitation were also appreciated in the discussion because during lockdowns it was hard to hear the voices. Those women and girls became role models for the community to fight back.

Question And Answers

What actions government should take regarding women trafficking?

Ms. Sayyad emphasised that a woman who is poor might have to indulge in unauthorized work. she highlighted that the common reason for women to work unauthorized work for income even if the perpetrator is a relative, however, if cities like Delhi get the overtime charges and if a woman needs to work beyond that, it means she is in need of money which provides a window to opportunities to others. She added that the trafficker will receive 7 years to life long imprisonment. Therefore, the government can make policies, rules, regulations, and stringent laws however, it is the women who need to be strong enough to stand for themselves.

How to spread awareness about women trafficking?

One needs to aware about the laws, regulation and what needs to do. It is important to understand the aspects for trafficking which are exploitation, lack of income, and affection. She emphasised that women should be aware of the laws that can safeguard their rights and provide security to them. This is what empowering would mean.

Vote of Thanks

At the end of the day, Mr. Tarun summarized the session and introduced trafficking as hazard. He thanked the speakers and students of their participation. He emphasised on the need to understand one's surrounding, potential hazard so that one can act calmly and rationally during the emergency/disaster and trafficking situation.

8. TRAINING PROGRAMME: DAY 6

Date	Topic to be covered	Mentor
March 09, 2022	POSCO Act-provisions for women	Ms. Sadaf Farooq Program Coordinator (Training & Capacity Building), Kailash Satyarthi Children's Foundation
	Basic Mapping in Disaster Management	Mr. Arup Dhar Senior Community Disaster Response Volunteer, ATDRVA
	Observers: Dr. Rashmi Gupta and Dr. Suruchi Singh, Skill Development Committee, Aditi Mahavidyalaya	

SESSION 1: POSCO ACT-PROVISIONS FOR WOMEN

Presenter: Ms. Sadaf Farooq, Program Coordinator (Training & Capacity Building), Kailash Satyarthi Children's Foundation

Key Takeaways

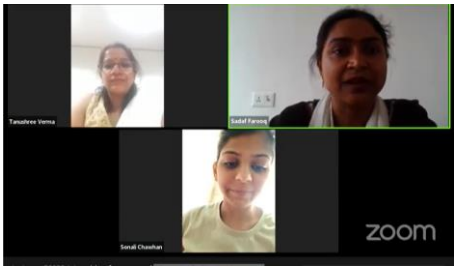


Figure 29: Ms. Farooq interacting with students

- Ms. Farooq initiated the session with an introduction to the Indian Penal Code and Protection of Children from Sexual Offences Act, (POCSO) 2012 where she highlighted that we needed a child centric act as there was no specific provision in law to deal with sexual abuse of children even when there were increasing cases in Crime in India reports of NCRB and Ministry of Women & Child Development. These reports also highlighted that the perpetrator was mostly a 'known person'.
- She introduced the key features of POCSO Act (2012) applicable from November 14, 2012, i.e.,
  - Gender-neutral and Child-Friendly procedures: The Act is gender neutral and regards the best interests and welfare of the child as a matter of paramount importance at every stage so as to ensure the healthy physical, emotional, intellectual and social development of the child.
  - The Act defines a child and different forms of sexual abuse
  - Provide Stringent punishments
  - Amended in 2019 and 2020 which provided more stringent punishments, and define child pornography
- The Protection of Children from Sexual Offences Act, 2012 mentions 12 key principles which are to be followed by anyone, including the State Governments, the Child Welfare Committee, the Police, the Special Courts, NGOs or any other professional present during the trial and assisting the child during the trial. These include:

• Right to life and survival • Best interests of the child • Right to be treated with dignity and compassion	• Right to special preventive measures • Right to effective assistance • Right to Privacy

• Right to be protected from discrimination • Right to be informed • Right to be heard and to express views and concerns	• Right to be protected from hardship during the justice process • Right to safety • Right to compensation

- She shed light on the offences and punishments regulated in the POCSO Act as shown in the figure 29.

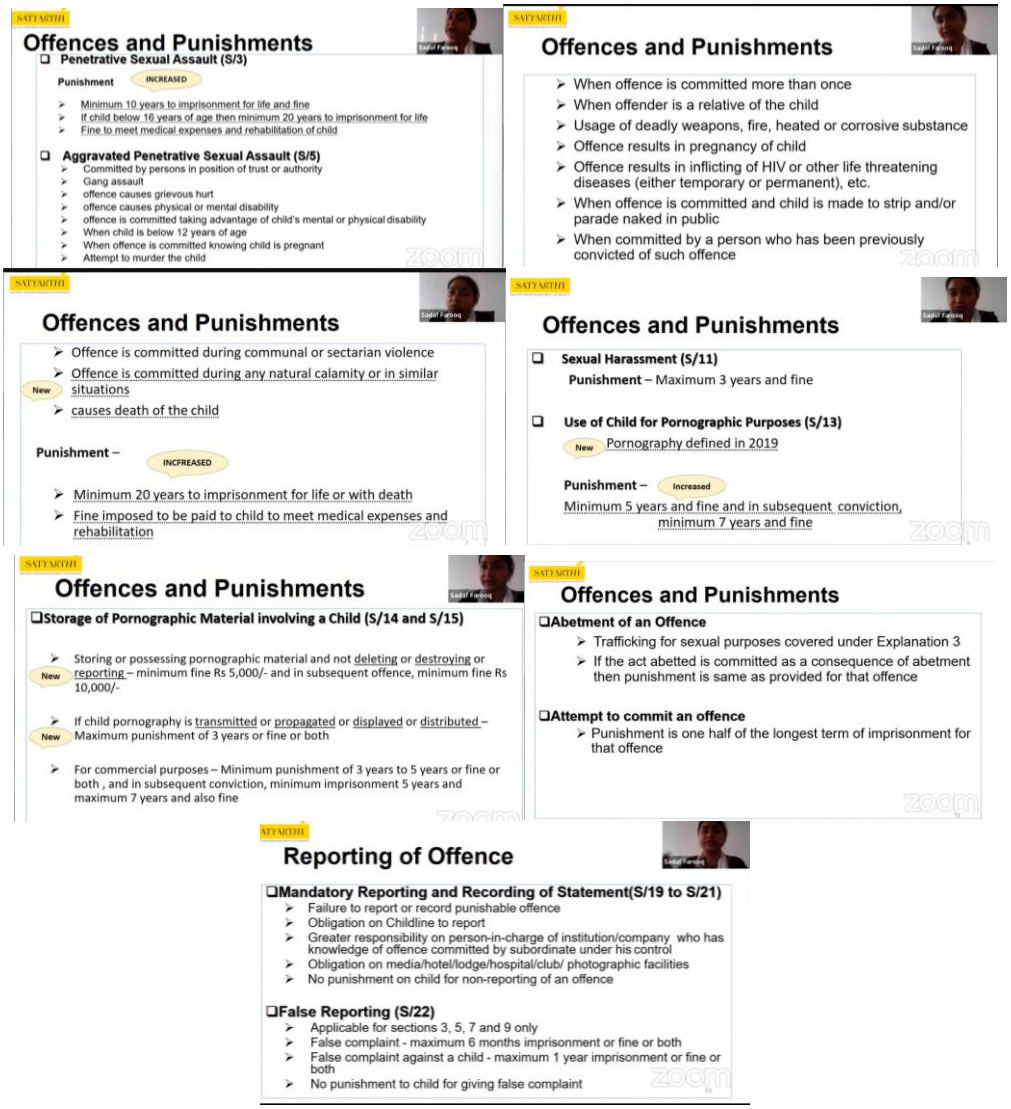


Figure 30: Offences and Punishments under POSCO Act, 2012

- She also highlighted that the Act also makes it mandatory to report such cases.
  - It makes it the legal duty of a person aware of the offence to report the sexual abuse.
  - In case he fails to do so, the person can be punished with six months' imprisonment or a fine.

Lastly, she urged the students to be alert and informed as knowledge and wisdom is the key to security, however, we should also be aware of how to fight back.

Question And Answers

Is POCSO Act related to the Nirbhaya case?

Ms. Farooq notified that though the POCSO Act was there, however, it was not related to the case even when one of the perpetrators was 17 years old boy. The Juvenile Justice (Care and Protection of Children) Act, 2015 was reformed.

How government tackle when unauthorized videos are shared on digital platforms?

Government cyber cells work on this. One can always report can act to the Ministry of Home Affairs to take appropriate actions. However, it is important that children and women are well aware of the laws and what actions can be taken during these times.

SESSION 2: BASIC MAPPING IN DISASTER MANAGEMENT

Presenter: Mr. Arup Dhar, Senior Community Disaster Response Volunteer, ATDRVA

Key Takeaways

- Mr. Dhar highlighted that mapping in disaster management is essential to acknowledge the geographical location, resources and other physical features. It also helps in understanding the situation easier to make timely decisions. Maps are also used in research, analysing and planning.
- He also introduced the different ways of mapping such as:
  - Social Mapping: By community participation through Participatory Rural Appraisal (PRA)
  - Conventional mapping according to scale, and
  - Digital Mapping using IT, Space Technology and other advanced technologies.

Figure 31: Digital Map

- While explaining community level mapping in Disaster Management, Mr. Dhar explained that it includes:
  - Social Map: Number of houses, types of houses, roads and bridges, water resources, community infrastructure, natural resources, etc.
  - Resources Map: Land use and Land cover, means of transportation, communication lines, critical infrastructures, relief shelters, recreational structures, etc.
  - Vulnerability Map/Risk Map: Who are vulnerable (elderly, PwDs, Sick, Pregnant women, families with thatched houses, fishermen), what is at risk (property, livestock, livelihood assets, crops, sources of drinking water, weak embankments, weak housing structures)
  - Safe and Opportunity Mapping: Safe shelters, critical infrastructure, protected water sources, river embankments, mounds of livestock, equipment, skills human resources, and alternative/evacuation routes.

Figure 32: Handmade Social Map

- He also shed light on how using PRA Exercises which are the set of tools used to gather information can be used while mapping for community-based disaster management maps.
- Mr. Dhar emphasised that developing maps, identifying and rating the hazard risk, and vulnerabilities will always be followed by approval and training to test the disaster management plan with community participation.
- He also highlighted the digital maps also developed to monitor and predict the hazard occurrence and intensity to ensure that disaster response teams have access to the maps and data they need to organize rescue and relief work.
- Lastly, Mr. Dhar urged that mapping is a core of hazard, risk, vulnerability and capacity assessment. It allows emergency management needs to be identified prior to an incident. Therefore, it essential to learn mapping skills and trained to identify the needs during emergency.

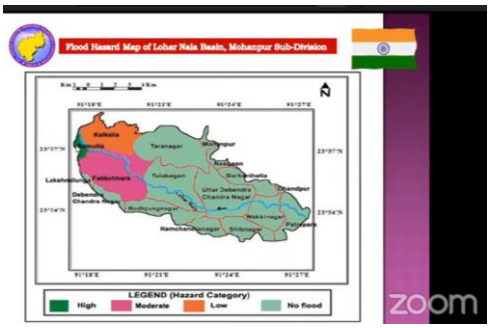


Figure 33: Hazard Map

Vote of Thanks

At the end of the day, Ms. Verma summarized the session and thanked the speakers and students of their participation.

9. TRAINING PROGRAMME: DAY 7

Date	Topic to be covered	Mentor
April 17, 2022	Secretariat related office work and psychosocial care	Ms. Chaya Panada Global Career Counsellor
	Observers: Dr. Santosh Yadav and Dr. Suruchi Singh, Skill Development Committee, Aditi Mahavidyalaya	

SESSION 1: CAREER DECISION & MENTAL STRESS AMONG THE STUDENTS

Presenter: Ms. Chaya Panada, Global Career Counsellor

Key Takeaways

- Ms. Chaya commenced the session string upon Stress which is our body's response to any pressure. It is triggered when we experience something new, unexpected or that threatens our senses of self or when we feel we have little control over the situation.
- The causes of stress among students were highlighted as:

Figure 34: Ms. Panda interacting with students

Examination	Poor time management	Leaving assignments to the last minute	Adjusting to life in a new environment
Educational course not synced with interest and aptitude	Difficulties with personal relationships	Balancing the demands of a family with studies	Career decision pressures

- In this context, she indicated the common mistakes the students make while choosing a career option:
  - Students don't take it seriously enough
  - They don't look at their skills, interests, values and personality
  - Not doing enough research and don't always realize that career planning is a project in itself
  - Choosing careers decided by parents
  - Herd mentality
  - They don't take on board what the career guidance counsellor is saying
  - They don't use the resources available to them
- For this, Ms. Panda introduced tips to handle carrier decisions such as self-assessment, identifying the interests and researching the appropriate job

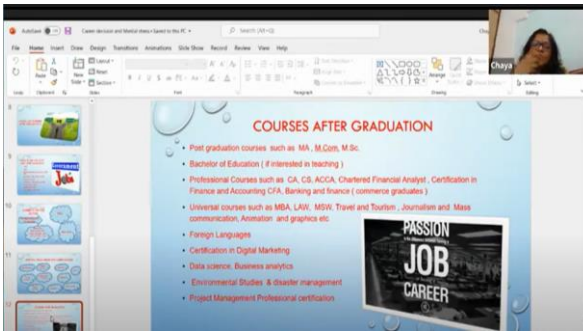


Figure 35: Presentation Slide: Career after graduation

opportunities, seeking professional help, taking career assessment tests and going for internships.

- She also introduced a few government jobs after graduation to help the students understand the array of job opportunities. While discussing the private sector opportunities, she highlighted that the students should have apt skills, experience and educational qualifications to work in the sector they wish for. Therefore, it is important to understand how they imagine themselves and in which job profile.
- She also emphasised essential skills that one should acquire or caress success, ie., Coping with emotions, Communication skills, Creative thinking, Critical thinking, Decision-making skills., Empathy, Interpersonal skills, problem-solving skills, work ethic, leadership, adaptability, digital technology knowledge, teamwork.

Vote of Thanks

At the end of the day, Mr. Tarun summarized the session and extended this thanks to the speaker who shed light on the most important aspects of student's life.

Dr

10. OFFLINE TRAINING PROGRAMME (6 DAYS TRAINING PROGRAMME)

Topic to be covered	Mentor
Demonstration of: **Search And Rescue** **First Aid**	Master Trainers from Zone4Solutions
Observers: Dr. Santosh Yadav and Dr. Rashmi Gupta, Skill Development Committee, Aditi Mahavidyalaya	

SESSION 1: SEARCH AND RESCUE

The session initiated with different transportation techniques:

1. Firemen's Lift

When the person who is being rescued is unconscious and just one rescuer is available, this procedure is employed. In this procedure, the rescuer makes the person lie on his or her stomach first. Then he lifts the injured individual by the armpits with both hands. With his left hand, he holds the injured person's right hand, while his free hand supports the affected person's right leg. Now the rescuer raises the affected person with both hands and places him or her such that the waist of the rescuer is slightly above the waist of the affected person.

2. Four Hand Seat Method

This strategy is employed for a weighty individual who can hold herself or himself with her or his hand. In this example, each of the two rescuers uses his right hand to grip his left wrist while using his left hand to grasp the other rescuer's right wrist.

Figure 36: Demonstration: Four Hand Seat Method

3. Log and Roll Method

- Enlist 3 or 4 people to help, with a leader positioned at the injured person's head, other helpers kneeling to one side, and one in charge of sliding the stretcher under the person.
- Roll the injured person onto their side, keeping the head and neck aligned with the body, and place the injured person on the stretcher.

Figure 37: Demonstration: Log and roll

- To log roll into bed, sit on your bed before lowering yourself onto your side, moving slowly as you pull your legs up and roll onto your back.
- To log roll out of bed, bend your knees while lying flat on your back before rolling onto your side, and then rise into a sitting position.

SESSION 2: FIRST AID

It was highlighted that during the event, the victim may suffer casualties, and panic resulting chaos and if provided with appropriate first aid and morale support, many lives can be save.

The session also demonstrated dressing of wounds such as bleeding, head injuries, fractures

Bleeding

- Firstly, they should provide morale to the victim;
- Ask the person to sit or lay down on the floor and try to stop the bleeding by applying pressure on the wound/injury;
- Stop the bleeding by pressing with both hands on the wound. If possible, ask the person to press himself on the site of injury.
- If the bleeding has stopped, cover the wound with a clean cotton cloth and wrap a bandage around the wound.
- Seek medical advice at the earliest.
- Do not leave the casualty alone and continue to observe the breathing

Figure 38: Demonstration: Dressing Head Wound

Head Injuries

Use a gauze roll, but a large bandana can also be used in an emergency. Fold the cloth into a triangle before placing it on the person's head, with the tip pointing to the back. Wrap the two ends around the back of the head, cross them back to the front, and tie the ends together.

Fractures

- If there is bleeding from the wound, stop the bleeding by putting direct pressure on the wound.
- Cover the wound thereafter with a clean cotton cloth.
- Suggest the person suffering from to support the injured part (e.g., a broken arm) himself or ask a bystander to do so.
- Immobilize the injured part with a bandage/splint; try not to move the injured part whilst doing so.
- Always take the person to nearest medical facility for proper care.

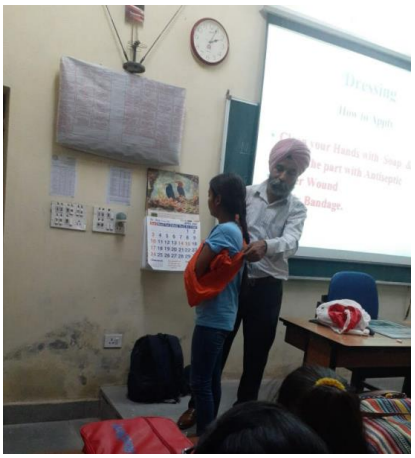


Figure 39: Demonstration: Dressing a Fracture

Secondly, **the procedure of CPR** was demonstrated:

Figure 40: Demonstration: Compressions for an Adult/Child

Compressions for an Adult/Child

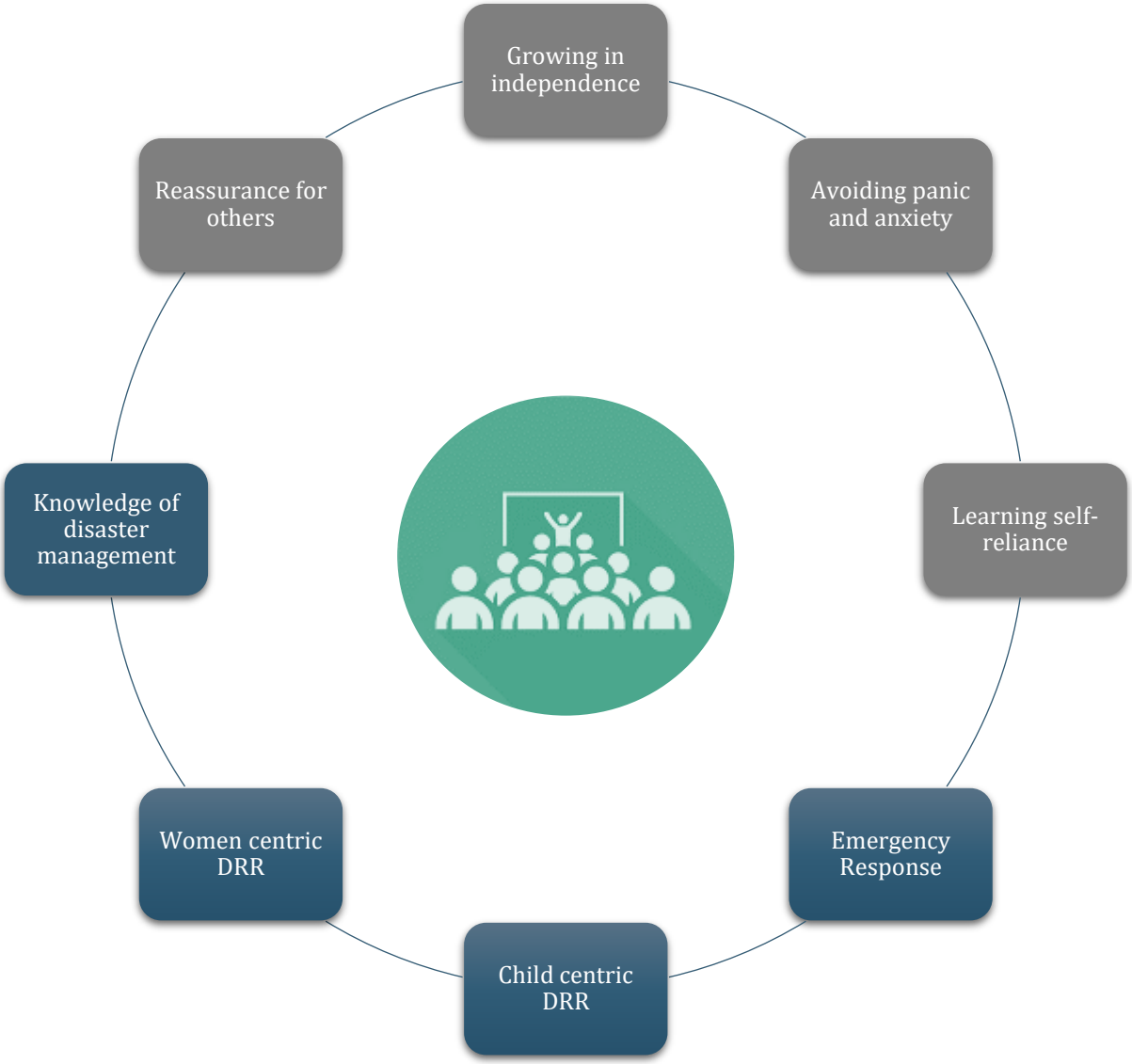
- Interlock your fingers and place one hand over the other.
- Place your joined hands palm down on the lower half of the patient's breastbone, with the heel of your hand on the lower half of the patient's breastbone.
- Place yourself so that your arms are completely extended and you can compress straight down at a 90° angle to the patient's chest.
- Compress at a pace of 100-120 compressions per minute to the correct depth, allowing for full chest recoil after each compression.
- For an adult, each compression should be at least 2 inches (5 cm) but no more than 2.4 inches (6 cm). For a kid, each compression should be at least 1/3 of the chest's anterior-posterior diameter. Do not go deeper than 2.4 inches (6 cm).
- Follow the right compression-to-ventilation ratio procedure. This is usually 30:2 for adults and children with a single rescuer. When two rescuers do CPR on a kid, the compression to ventilation ratio is 15:2.

Compressions for an Infant

- The essential criteria for compressing a new born are the same as for adults and children, however, the hand location and compression depth are different.
- One rescuer: Position yourself by the patient's side to cut down on time spent providing ventilation. Place two fingers slightly below the nipple line in the centre of the patient's chest.
- Two rescuers: Position yourselves at the patient's feet. With the rescuer's hands around the patient, place both thumbs in the centre of the patient's chest, right below the nipple line. The patient's head will be the focus of the second rescuer.
- Allow for complete recoil of the chest between compressions by compressing at a pace of 100 to 120 compressions per minute (120 for neonates).
- Compress to a depth of at least 1/3 the anterior-posterior diameter of the patient's chest (approximately 1.5 inches). Follow proper protocol for the rate of compressions to ventilations. For single-rescuer CPR this is 30:2, two-rescuer CPR changes to 15:2.

Figure 41: Demonstration: Compressions for an Infant

11. KEY LEARNING



12. ANNEXURE

12.1 CURRICULUM

Date	Number of Hours	Topic to be covered
Day 1	5 hours	Leadership and communication /coordination skills in view of Disaster Management. Basic Concept of Disaster Management in India
Day 2	6 Hours	Online theoretical classes and detailed Hands-on demonstrative training on basic First aid
Day 3	3 hours	Basic Trauma counseling skills, psychosocial care, and Mass Casualty Management
Day 4	6 hours	Basic knowledge on Child and Women Safety Rights
Day 5	6 hours	Fire Safety and Search & Rescue
Day 6	2 hours	Development of GIS based evacuation maps
Day 7	2 hours	Secretariate related office work

12.2 Orientation Programme Schedule

PROGRAMME

Orientation Programme on Skill training at Aditi Mahavidayalaya,

University of Delhi

Date: 18th December 2021 **Time:** 11.00 AM -12.30 PM

YouTube Link: https://youtu.be/X8L1StzFnaw

Time	Topic	Speaker
11:00-11:10	Introduction of the programme	Prof. Sadhna Jain, Aditi Mahavidyalaya
11:10-11:15	Welcome Address	Prof. Mamta Sharma, Principal, Aditi Mahavidyalaya
11:15-11:20	Inaugural Address	Prof. Rajni Abbi, Chairperson, GB, Aditi Mahavidyalaya
11:20-11:25	Overview of skill building in DM programme	Mr. Nakul Kumar Tarun, Director, Zone4Solutions
11:25-11:30	Special Address	Mr. Rajendra Singh, Member, NDMA (Chief guest)
11:50-12:00	Keynote Address	Prof. Santosh Kumar, NIDM (Special Guest)
12:00-12:10	Disaster Risk Reduction and role of university	Dr Nitin Malik, Registrar, Ambedker University
12:10-12:15	Role of youth in DRR	Mr. Awadesh Kumar, Associate Professor, Invertis University
12:15-12:25	Q&A	Ms. Tanushree Verma, Head (Training and Research), Zone4Solutions
12:25-12:30	Vote of thanks	Sh Baldev Gulati, Aditi Mahavidayalaya

12.3 ORIENTATION PROGRAMME FLYER

12.4 CERTIFICATE OF COURSE COMPLETION