



**Building a sustainable knowledge and research infrastructure in
LMIC's for supporting lead agencies to implement road safety**

Workshop organized by Foundation Road Safety for All , 31st of August 2024

15th World Conference on Injury prevention & Safety Promotion

New Delhi, India, 31st of August – 4th of September 2024

Voorburg, 14 September 2024

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Building a sustainable knowledge and research infrastructure in LMIC's for supporting lead agencies to implement road safety

Background of the workshop

Despite the extensive dissemination of road safety information to Low-Income and Middle-Income Countries (LMICs), there remains a significant gap in the knowledge necessary to effectively absorb and utilize this information 'sent' from High Income Countries (HICs). This workshop dealt with the issues relating to a shortfall in the process of knowledge transfer in LMICs.

In order to develop evidence-based policy, LMICs need research programs that are able to transfer safe system principles to the local context and culture. Several literature overviews illustrate the lack of such research in LMICs, i.e. the limited number of programs at local universities and research institutes. Although recently initiatives have been taken in some countries, the implementation of such programs is urgently needed.

Based on this observation Road Safety for All calls on international organisations to establish a special program for the development of a sustainable road safety knowledge and research infrastructure in LMICs. Such a structural local capacity is a prerequisite to translate international road safety knowledge into local guidelines and to develop an evidence-based road safety policy. Most importantly this local infrastructure will give countries a national knowledge bank, thus providing them with an urgently needed sustainable road safety memory.

By attending the 15th World Conference and organizing this workshop, Road Safety for All tries firstly to get this subject on the agenda of the international community and create interest and consciousness of the problem. Secondly it will make contact with people who want to contribute to solutions (eg by participating in a pilot project)

Workshop program

In close cooperation with the moderator, Prof. Prerana Arora Singh, following program has been prepared by the organizer, Road Safety for All.

Paul Wesemann, Director of Road Safety for All, the Netherlands 8.30

Opening

Presentation of RSfA and of moderator

Prof.dr. Prerana Arora Singh , Nirwan University , India, moderator 8.35

Welcome

Presentation of Centre for Road Safety Management at Nirwan University

Presentation of workshop program and speakers

Paul Wesemann, Road Safety for All 9.00

Introduction to the workshop

Summary of the position paper

Starting points for a special program

Dr. Matts Belin, WHO, Global Lead Decade of Action 9.25

The Need for Evidence-Based Policy Making and the Creation of Sustainable Knowledge Institutions

Mrs. Nidhi Singh, Additional Transport Commissioner, Govt of Rajasthan 9.50

Evidence based policy

Development of a strategy and program

Involvement of data analysts and researchers

Involvement of NGO's

Coffee break 10.15 -10.45 am

Dr. Richa Ahuja, Indian Institute of Technology, Kharagpur 10.45

Data on crashes and victims

Organization of collecting, processing, quality control, analysis

Asia Pacific Road Safety Observatory

Availability of data for researchers

Dr. Puspa Raj Pant, Advisor Nepal Automobiles' Association (NASA) 11.10

Development of a road safety program in Nepal

Contribution of research to work of NGO's in Nepal

Role of Global Alliance in LMICs in general

Prof.dr. H.R.Pasindu, University of Moratuwa, Sri Lanka 11.35

Examples of research

Research organizations in LMICs/ Sri Lanka

Pilot project for setting up a research institute

Discussion guided by moderator
After each presentation and at the end of workshop
Wrap up and conclusions by moderator

12.00-12.30 am

Paul Wesemann, Road Safety for All
Closure

12.30 am

Summary of the presentations

1. *Paul Wesemann, Founder and Director, Road Safety for All, the Netherlands*

Workshop opening

Road safety for all is a legal entity (a foundation according to Dutch law) since 2009, seated in the Netherlands. Its mission is to improve road safety in LMICs through application of knowledge. NGO, not for profit. Small staff, all volunteers.

General Strategy: operating as a think tank. Problem analysis, recommending solutions, designing a plan. Starting up new developments. Develop a program together with a strong lead-partner. Gradually handing over responsibility to lead partner.

The plan of Road Safety for All for building knowledge and research infrastructure in LMICs is based on position paper. Searching for strong partners by mailing, in person meetings, collecting comments, discussions in person. A.o. at this conference.

Presentation of moderator.

2. *Prof. Dr. Prerana Arora Singh, Nirwan University, India, (Moderator)*

Presentation of Centre for Road Safety Management

Nirwan University, located in Jaipur, India, has been actively involved in promoting road safety through various initiatives. The university has conducted research on road safety issues, such as analyzing accident data, identifying black spots, and assessing road user behaviour. The mission of the Centre for Road Safety Management is to:

- Advance knowledge through rigorous research
- Empower individuals and communities through education and training
- Effect meaningful change through advocacy and outreach

The objectives and priorities are as follows:

- **Enhance road safety awareness and education:** Develop and implement comprehensive educational programs as per NEP and campaigns to raise awareness about road safety practices among students, faculty and the wider community
- **Research and innovation in road safety technology:** Conduct cutting edge research to identify and develop innovative technologies and solutions that can reduce road accidents and improve overall traffic safety.

- **Collaboration with government and industry** : Establish partnerships with government agencies, industry leaders, and other educational institutions to promote the exchange of knowledge, resources, and best practices in road safety management.
- **Establish sustainable funding mechanisms:** Develop and secure sustainable funding sources through grants, partnerships, sponsorships, and government support to ensure the long-term viability and success of road safety initiatives and research projects.
- **Advocacy and policy development:** Advocate for the development and enforcement of effective road safety policies and regulations, and actively participate in the formulation of guidelines and standards to ensure safer road environments.

Formation of the advisory board: A total of 15 eminent experts from different national organizations have accepted their invitation to be part of the advisory board under the chairmanship of Padamshree Dr. Subroto Das

The main experts are from ASDC, NATRAX, Maruti, CDTI BPRD, ITS, Netradyne, Nagarro, Rajasthan High Court, Lifeline Foundation, CRRI, 3M, Rajasthan Forensic Science Lab, NICSI, Ready Assist, and from USA.

Milestones within the first 6 months: Received adhoc special status of UN for registration of “summit for future” high level conference to be held in September 21-22 2024 at UN HQ, USA
UN Civil Society Conference 2024 in Nairobi, Kenya from 9 – 10 May 2024.

Formation of working group:

- 1) For road engineering and urban planning
- 2) For automotive engineering and AI based technology
- 3) For law enforcement – Police, law agencies
- 4) For emergency care – pre hospital, in hospital and post hospital care
- 5) For road safety management, driver behaviour and sustainable funding

Presentation of the workshop programme and the speakers

3. Paul Wesemann, Founder and Director, Road Safety for All, the Netherlands

Introduction to the theme of the workshop

UN decade of action 2011-2020

- Goal 2020: traffic deaths should be reduced by 50%
- There should be much knowledge transfer from HICs to LMICs in things such as written materials (guides, reports) and training courses. Projects (city designs, IRAP star rating) and legislation. Management (observatories, auditing, lead agencies, planning, auditing)
- The results however have been below the expected result. Traffic deaths have reduced only by 5% and fatality rates have only reduced by 16%

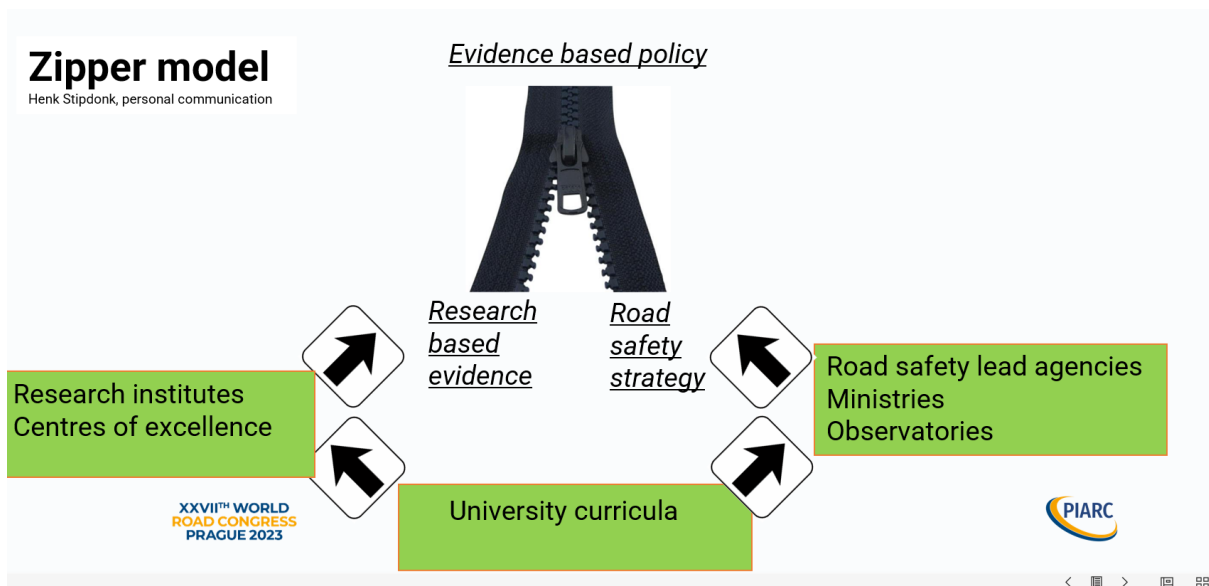
Global burden of traffic deaths (2021)

- 1.19 million people have been killed in road traffic accidents and 92% of these have deaths have occurred in LMICs
- Fatality rate has been 15 people per 100,00 people in HICs it has 8, 16 in MICs and 21 in LICs

UN decade of action 2021-2030

- Goal of the decade of action 2021-2030 is to reduce traffic deaths to 50% by 2030
- Keep sharing knowledge of safe system approach with LMICs
- To find an answer to what is needed to receive and transfer this knowledge to action?
- Learn from evidence based policymaking in HICs

Evidence based road safety policymaking in HICs



Building Block for local road safety strategy/ management structure

- Lead agency and ministries
- Regional/ municipal levels of government
- Observatory: data on road traffic crashes and victims
- Staffing: road safety specialists on permanent positions
- Universities: training of specialists
- Community participation (NGOs, civil societies, schools, etc)

Building Blocks for research-based evidence/ knowledge structure

- Knowledge on effective measures in local context should be made available
- Local research should be conducted
- Observatory should be set up to gather data on road traffic crashes and victims
- Research institute, universities and/or centre of excellence
- There should be researchers on permanent positions and universities should train the researchers

Zippering of road safety strategy and knowledge

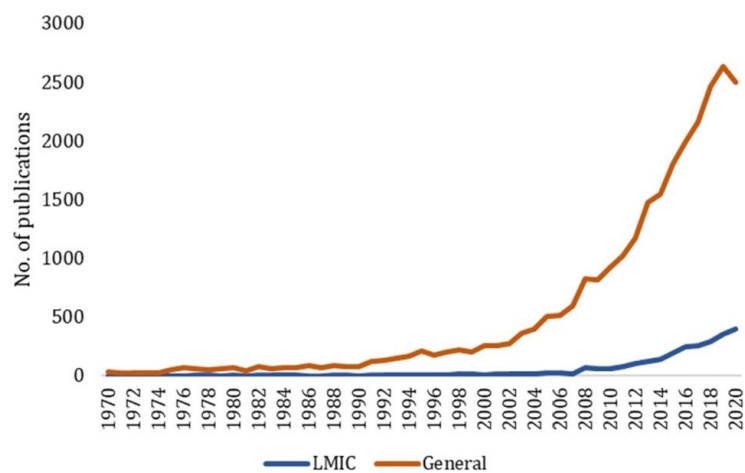
Cooperation and communication between parties at all stages:

- Decision making on policy
- Programming of local research
- Designing university curricula
- Collecting data on crashes and victims

Strengthening knowledge structure in many LMICs

- Local Research : there is no need to “re-invent the wheel” of safe system principles but these principles should be transferred to locally tested measures
- Training of road safety specialists with knowledge about local problems and measures
- Incorporate road safety specialists in management structure, on national level there should be lead agencies and ministries and regional and municipal level

Lack of Local Research



Road safety publications (Haghani et al, 2020)

Completing the building blocks in LMICs

- Set up permanent local research institute
- Cooperation with local universities and other research institutes
- Cooperation with universities and institutes abroad (like Fersi)
- National road safety knowledge bank and memory
- Develop university curriculum

- Create permanent positions for specialists at all levels of government
- Connect with road safety observatories
- Set up procedures for “zipper” cooperation

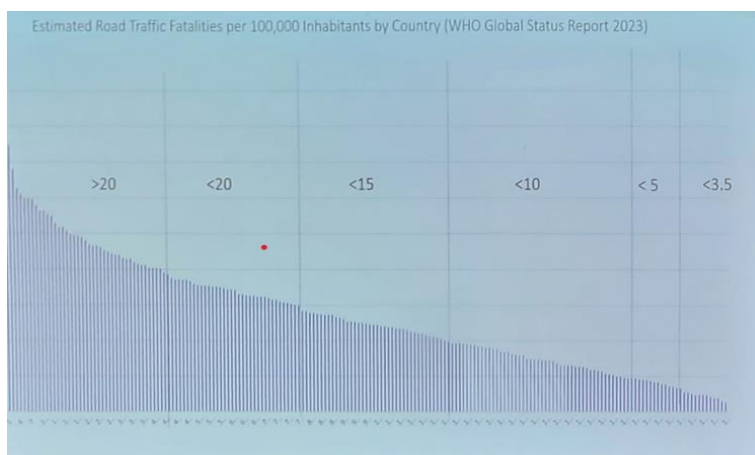
Special International Program

- Setting up knowledge and research infrastructure in LMICs
- International support
 - 1) Program management by respected international organization
 - 2) Management team of involved countries and stakeholders
 - 3) Multiyear financing
 - 4) Program development facilitated by road safety for all
- Startup with pilot projects

4. Dr. Matts Belin, WHO, Global Lead Decade of Action, Switzerland

The need for Evidence-Based Policy Making and the Creation of Sustainable Knowledge Institutions

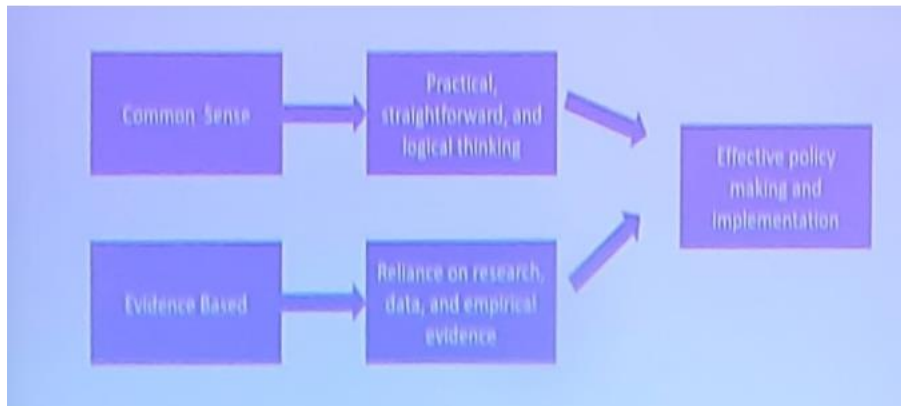
The Global Burden of Traffic Accidents Road traffic accidents claim 1.19 million lives annually, with 92% of these fatalities occurring in LMICs. Despite global efforts to reduce traffic deaths, LMICs continue to face disproportionately high fatality rates. The fatality rate is 21 per 10,000 people in low-income countries, compared to just 8 per 10,000 in high-income countries (HICs).



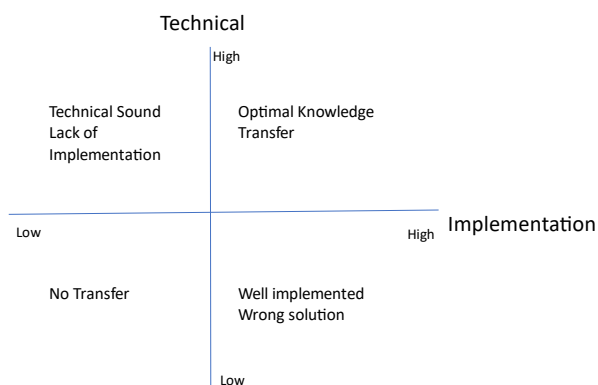
The Decade of Action for Road Safety The UN’s Decade of Action for Road Safety (2011–2020) set a goal to reduce global road traffic fatalities by 50%. However, by 2020, traffic deaths had only decreased by 5%, with fatality rates reduced by 16%. For the 2021–2030 decade, the goal remains to halve traffic fatalities. Achieving this target will require

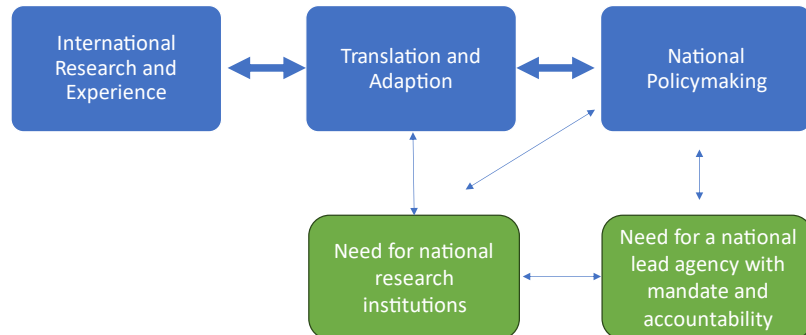
significant knowledge transfer from HICs to LMICs, as well as localized strategies that address the unique road safety challenges in each country.

Common sense vs evidence based policy making



Two Dimensions of Knowledge Transfer





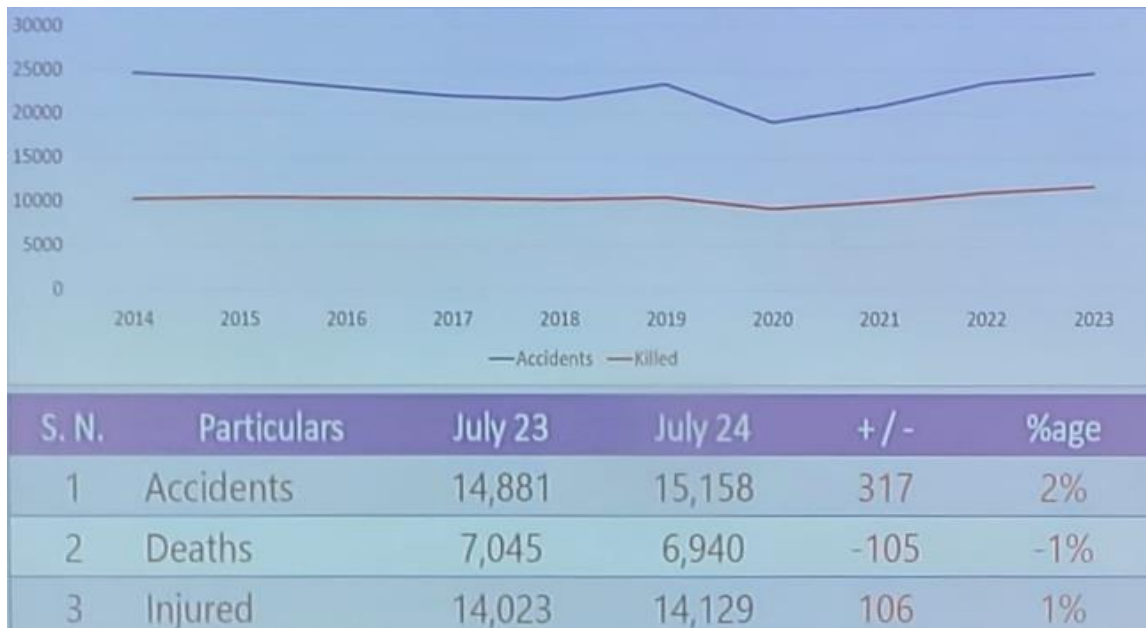
5. Mrs. Nidhi Singh, Additional Transport Commissioner, Govt of Rajasthan, India

Evidence based policy and Action Plan for Road Safety

Road safety challenges in India

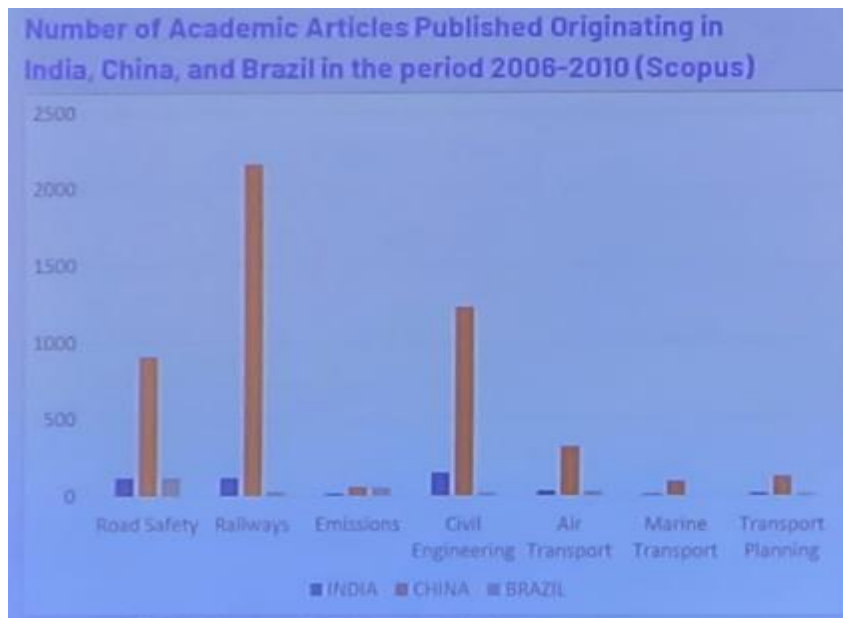
- 1) High population and unplanned growth of cities
- 2) Heterogeneous mix of traffic
- 3) High fatality rate
- 4) Inadequate infrastructure
- 5) Poor enforcement
- 6) Lack of trauma facilities
- 7) Poor public transport
- 8) Limited awareness

Road crash scenario in Rajasthan



Evidence based policy: Status of Research

- India contributes only 0.7% articles on road traffic injuries world-wide
- Number of papers in China is more than 3 times than India
- India will have to grow at more than 10% per year to reach the level of China
- Road traffic injury research output in India is critical and insufficient for policy making



Evidence based policy: Use of iRAD for decision making

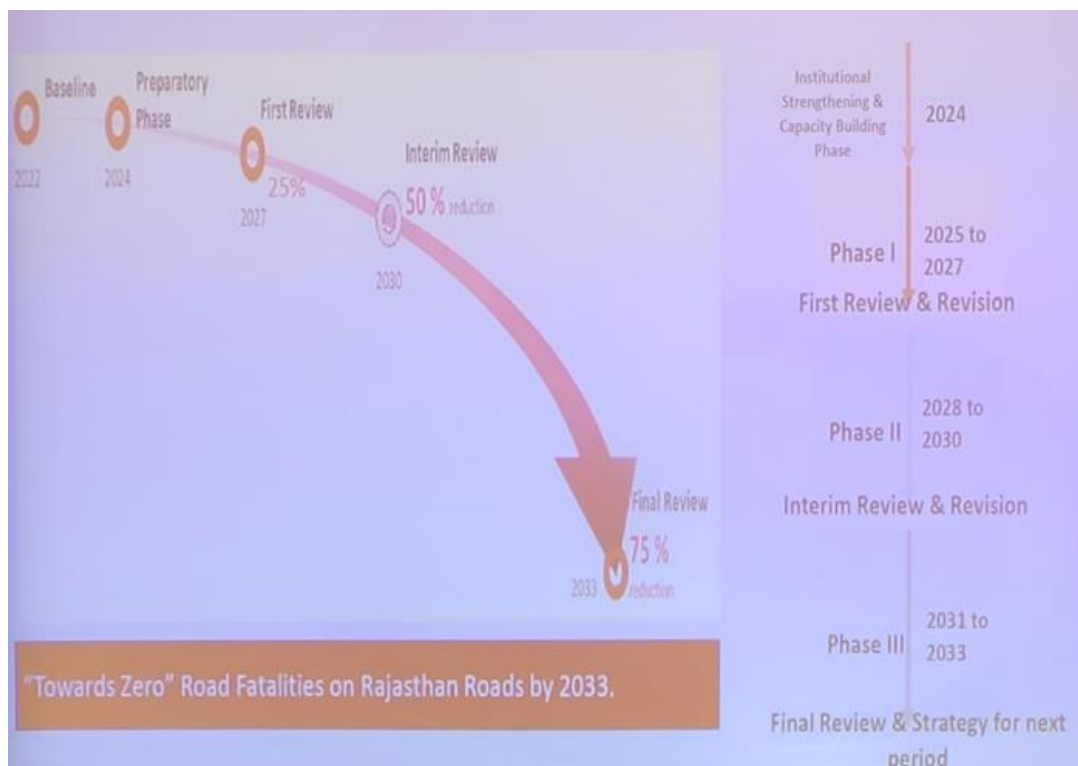
- Number of Entries made by police, transport, ROA, and M&H have increased
- More than 80k+ accidents have been reported since 01 January 2021 in Rajasthan

- Identification of girds and highways with serious accidents in the state using iRAD
- Used for road safety inspections, monitoring, enforcement and policy formulation etc. by districts
- iRAD is to be upgraded to eDAR

Development of a strategy and a plan

- A 10- year Road safety strategy and action plan has been developed under RSHDP-II project funded by world bank
- Has been approved by Hon'ble Dy. CM & Transport Minister
- Assessment of current scenario and institutional set up in the state
- Inclusion of department-wise initiatives with year-wise target and budget provision have been included

3- Phased approach for strategy execution



War-room: State Initiative regarding Data Analysis & Research

- A road safety war room established in state road safety cell
- Provide speedy medical response to road crash victims
- Get timebound factual and joint inspection reports from districts
- Conduct data analysis of grievous and fatal road crashes and suggest remedial measures to be taken

- Lead agency is planning to develop a centralized command and control centre within war room

Promoting research and development

- **Funding research** – Government and private organizations should invest in research on road safety
- **Training researchers** – Focus on data analysis, accident investigation, and prevention strategies
- **Sharing knowledge** – dissemination of research findings through conferences, publications, and media platforms
- **Collaborations** – Facilitate collaborations between researchers, practitioners, and policy makers to translate research into practice
- Conduct hackathons on road safety
- Develop centre of excellence for each stakeholder

Involvement of NGOs

- NGOs play an important role in creating mass awareness
- Road safety is a multi-disciplinary subject and demands in-depth knowledge of policies, procedures, standards, guidelines, legislation and best practices for disseminating correct knowledge
- Number of skilled NGOs purely working in road safety are limited
- Presence of such NGOs are negligible in districts and small towns
- State Government rules pose a hurdle for allocating budget to NGOs

6. Dr. Richa Ahuja, Indian Institute of Technology, Kharagpur

Road Safety Data for Evidence Based Policy

Road safety problem is a multi- level phenomenon with measures needed on:

1)Strategic level-

- Develop road safety management organization
- To build a road safety strategy aligned with safety culture and broader context of the sustainable development goals
- Develop a knowledge infrastructure to enable and facilitate transfer of the safe system principles to the local context

2) Tactical level –

- Design: Implementation of new (public) transport systems and redesigning road networks, cities and villages with the safety of vulnerable road users in mind
- Regulation and legislation: Manuals for road design and traffic rules, regulating traffic behaviour, use of safety equipment, construction of vehicles, may also be considered as measures at this level
- Enforcement: the use of seat belts, helmets and speed have proven to be very cost effective and relatively cheap

3) Operational level –

- Speed plays a central role and should be regulated through a well-defined speed management approach
- Roads should be self-explaining, forgiving and exclude safety systems in mind
- Vehicles should be designed with modern, active and passive safety systems in mind
- In the background, a well organized post-crash health care system should function to reduce the severity of injuries acquired in road traffic crashes

Types of data useful in road safety

1) Key safety data includes :

- Exposure data (traffic volume, population data)
- Final outcome data(deaths and injuries)
- Intermediate outcome data (average speeds, protective equipment fitment and use, level of drinking and driving, network and vehicle safety quality)

2) Other important data:

- Road asset data (information on safety related road and roadside design and features)
- Attitude survey data
- Enforcement data

Sources of crash data

- Police departments and hospitals provide most of the data used in road traffic injury prevention
- National crash data (NCRB/MORTH in India) – typically collected by police – (globally 70% of countries use police data as the primary source)
- Health sector data – required for meaningful injury classification at country level to complement police data and to provide an optimal means of defining serious injury
- No single crash injury database will provide enough information to give a complete picture of road traffic injuries or to fully understand the underlying injury mechanisms (iRTAD,2011)

- IRTAD (2011) recommends that police data should remain the primary source of road crash statistics, but that this should be complemented by hospital data due to data quality issues and to identify levels of under-reporting

Key sources of data on road traffic injuries

- 1) **Police** - The police gathers data like number of road traffic incidents, fatalities and injuries, type of road users involved. Age and sex of casualties, types of vehicles involved. Police assessment of cause of crash, location etc.

It has been observed that level of details vary from one country to another. Police records can be inaccessible. Underreporting of injuries is a common problem in all countries, particularly in LMICs

- 2) **Health facilities** – They gather data about fatal and non-fatal injuries. Age and sex of casualties, costs of treatment

The observations are that the level of detail varies from one health care facility to another, injury data may be recorded under “other causes” thus making it difficult to extract for analysis

- 3) **Insurance firms** – They collect data about fatal and non-fatal injuries, damage to vehicles, costs of claims.

It has been observed that these data may be difficult to obtain

- 4) **Other private and public institutions** – They collect data about number of fatal and non-fatal injuries aiming employees, damages and losses, insurance claims, legal issues etc.

Observations are that the data may be specific to the planning and operation of the firms

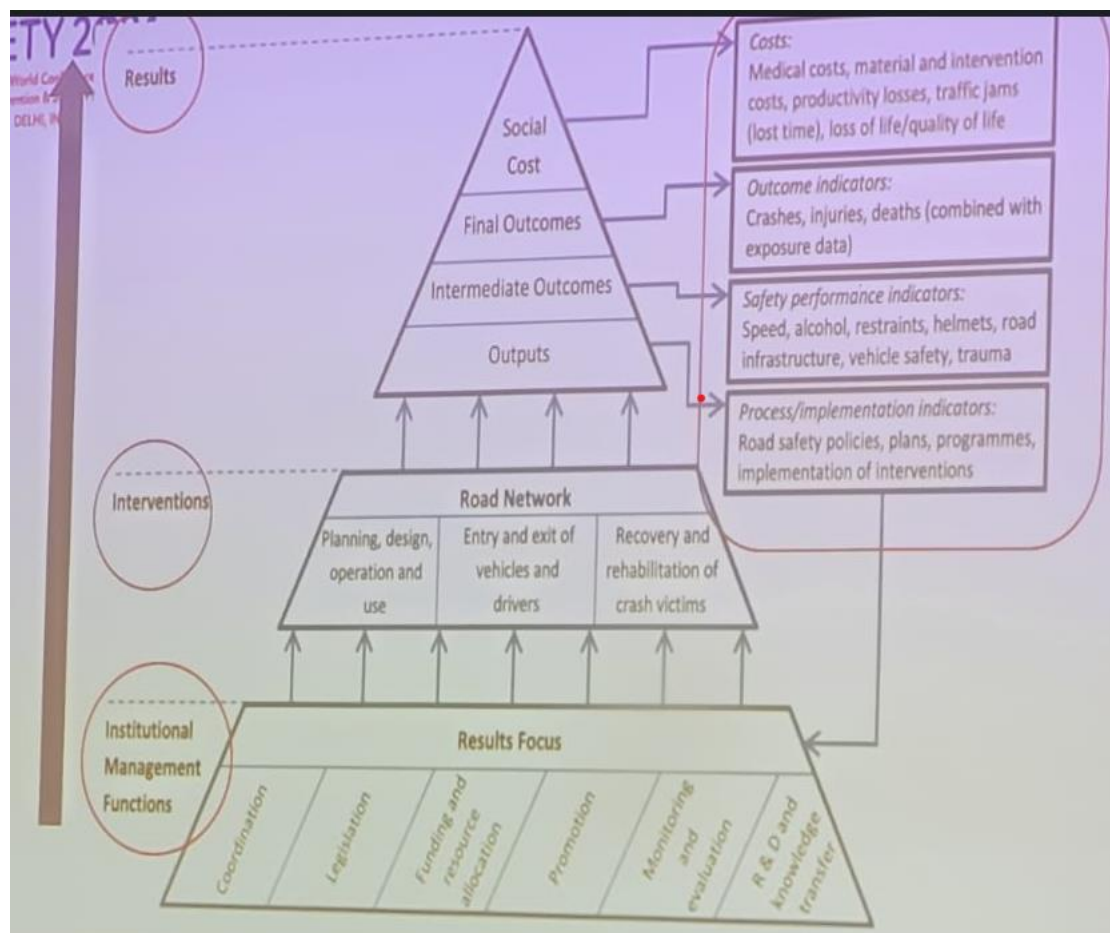
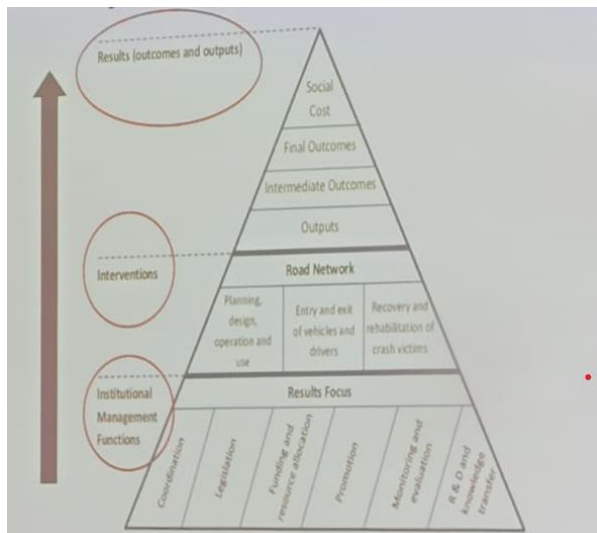
- 5) **Government departments and specialized agencies** – the recorded data is along the lines of income and expenditure data, health indicators, exposure data, pollution data, energy consumption, literacy levels.

Observations are that the data are complementary and important for analysis of road traffic injuries. The data is also collected by different ministries and organizations, though there may be one central agency that compiles and produces reports, such as statistical abstracts, economic surveys etc.

- 6) **Special interest groups** – they record the number of road traffic accidents, total fatal and non-fatal injuries, type of road users involved, causes, location etc.

The various organizations have different interests

Road safety management assessment framework



Definitions and standardization of data

- Road traffic injury and death data can be missed by the data collection system because of different definitions used in different countries and contexts. This highlights the

need for definitions to be standardized and applied cross different countries and settings

- Variations in the interpretation – Time period, different countries and by different people recording the information
- Relating to the classification of injury: The method of assessment

	CATS	PCR
Duration of data	6 months (year 2018)	12 months (year 2018)
Operation control	102 control room	100/112 control room
Geographic scope	Delhi	Delhi
Number of road accident calls received per day	141	464
Number of units	265	716
Average number of calls taken per day	6	10
Sector	Public-private partnership	Public
Year Established		
Types of services provided	EMS	Police, control room coordinates with Fire and EMS
Level of prehospital care provided	BLS, ALS	BLS

– Double number of accident calls

Underreporting:

- Underreporting of both deaths and injuries is a major global problem affecting not only low income and middle income countries but also high income countries
- Underreporting can arise form:
 - 1) a failure on the part of the public to report
 - 2) the police not recording cases reported to them
 - 3) hospitals not reporting cases presented to them
 - 4) an exemption form certain institutions, such as the military from directly to the police
 - 5) victims sometimes being unable to afford to attend hospital, especially in some low income and middle income countries

Other issues

- Missing information within individual records
- The scientific soundness of methods used

- Inadequate quality control
- Lack of data collection on cycling and walking in transport information systems
- Lack of data on exposure
- The accuracy and completeness of police assessment of cause of crash
- Lack of rigorous evaluation of interventions, particularly in low-income and middle-income countries

Steps to establish and improve crash data systems

- Assessment of existing data sources
- Development of a crash report form
- Engagement with key stakeholders
- Development of a crash data system
- Ensuring the quality of this data

Annual reports with road traffic statistics

Reports have been done by:

- National Crime Records Bureau (NCRB)
- Ministry of Road Transport and Highways (MoRTH)

These are useful for general trends and comparison across cities or states. According to official statistics published by the ministry of road transport and highways (MoRTH), 153,972 persons were killed in road crashes in the year 2021. This corresponds to 11.3 deaths per 100,00 population

However, Researchers need crash-level information as well to do detailed analysis

Police reported crash data

Key variables typically collected include:

- Crash location (including geographic coordinates)
- Time of day, week, month of year, year
- Information on those who were involved (including road user type, age, gender, injury sustained)
- Details on the environment (light conditions, weather conditions, road surface wet or dry)
- Information regarding what happened in the crash (vehicle movement types , objects struck, and contributory factors such as speed, alcohol use or driver distraction)
- Vehicle factors (type of vehicles involved)

Advancing road safety in India

- Initiative of ministry of road transport and highways, government of India started in March 2020
- Application to collect, store, manage , analyse, interpret, and visualise the road accident information
- Centralized road accident database for reporting, managing , and analysing road accident data across the country
- iRAD is rolled out in all states/UTs of India
- NIICSI is carrying out the design, development and implementation of iRAD application

iRAD Field APP

1) Police:

- Field Officer login
- SHO login
- District SP login
- State login

2) Transport:

- MVI login
- RTO login
- STA login

3) Highways:

- AE/ADE login
- DE login
- SE login
- CE login

4) Health:

- Medical officer login
- Region JD login
- DMS login

Improving Road Safety: A Data-Driven Approach to Accident Prevention

- 1) On site accident data collection through mobile based software application***
- 2) To perform data analysis and recommendation of remedial measures***
- 3) Improvement of the accident prone area***

Understanding the Scope of Road Traffic Accidents: Injury Pyramid and Accident Statistics in the USA

- The pyramid shown represents from top to bottom the number of fatal crashes, injury events, and those with no injury to any occupant (property – damaged only)
- Police – reported crashes is the sum of the top three categories
- The lowest number represents the total number of crashes that is far greater than police reported number



Road safety data for evidence-based policy

There are many important road safety problems that have not received attention primarily because they do not occur in HICs, for instance:

- Addressing motorcycle – pedestrian crashes
- Vehicles such as autorickshaws, tuk-tuks, and other vehicles that are primarily produced and used in LMICs
- Post – crash care literature focuses almost exclusively on evaluating ambulances while most victims are carried to hospitals in private vehicles in LMICs

Way Forward

- There is an urgent need to fill these gaps in evidence through well -designed research studies with the use of high quality research methods
- In recent years, the research output from many LMICs has dramatically increased. Our initial search for evaluations identified many papers from China, India, Iran, Brazil, and other LMICs on road safety applications, especially those related to transportation engineering

- In fact, many of these countries have a large pool of well-trained transportation engineers. However, most of these studies did not meet our inclusion criteria, most often because they used cross-sectional study designs with multivariate regression, which is often poorly suited for casual inference
- Nevertheless, the EGM shows that in high income countries the use of observational epidemiological approaches (eg. In the case control method) has been deployed extensively to control for many of the sources of variation in cross-sectional data
- Similarly, well designed observational before after studies can have high validity but are rarely used in LMICs
- Therefore, it is important to build the capacity of road safety researchers, especially transportation engineers, in LMICs in the use of high quality epidemiological study designs
- A comprehensive data collection in strategy should be put in place and regularly monitored to ensure that it is fit for purpose, accurate and complete
- A crash database should be fully implemented that contains all crash data
- Data should be spatially coded, and appropriate quality control checks should be put in place
- Information in road assets relating to safety outcomes should be contained within a comprehensive roadway inventory database
- Linkages should be made between key sources of data, particularly between data collected by police and hospitals, and between crash and asset data

7. Dr. Puspa Raj Pant, Advisor, Nepal Automobiles' Association (NASA), Nepal

Advocacy and Research Contribution of Road Safety NGO's

Introduction of Nepal Automobiles' Association (NASA Nepal)

- Established in 2008; working for road safety since 2012
- Member of Sports Council of Nepal (Min of Sports)
- Affiliated to FIA, FIM, IRF, Global Alliance, IRU, IRVP and BRITA Etc
- Working areas: **Motor Sports, Road Safety, Drive Tourism & Automobile Mobility**
- Contributing road safety policy influencing through advocacy
- Started conducting small scale "research"

Provincial Road Safety Policy Advocacy

- interaction on provincial road safety policy, motorcycling safety, province Road Safety Council, Provincial Action Plan and Multi-sector engagement on road safety.
- Capitals of all the 7 provinces of Nepal.
- 587 stakeholders (experts, Members of Province Assembly, professionals, government officials, media-persons, traffic police, youth).

Environmental modification and awareness for safer schools

- Successful implementation of SR4S campaign in 12 schools from Kathmandu and 2 from Nuwakot
- Road safety training to more than 5000 students at 14 different schools/colleges
- 26 radio episodes on Road safety and safe school zone

Motorcycle helmet advocacy

- Member of taskforce committee to develop the Nepal standard for motorcycle helmets
- Member of the working group on strategic plan for helmet use

Head injuries and helmet use

- Purposive sample of 3 Kathmandu hospitals:
83% of 419 traffic injury patients involved in a motorcycle crash
 - . Driver - 66%
 - . Pillion rider - 21%
 - . Pedestrian - 13%
- 14% drivers (n=232) head injuries
- 37% pillion riders (n=73) head injuries
- 1% pillion riders had spinal injuries

NGO's and research

NGOs can facilitate knowledge transfer and monitoring the progress in regards to the dissemination of research findings. Simultaneously, NGOs can be integral part of academic research endeavours. This will ensure the mutual cooperation and provide synergy to the efforts aimed at the improvement of meaningful utilization of knowledge sent to LMICs.

Need for research capacity

- Locally appropriate evidence-based interventions are lacking due to lack of research
- Research is needed to inform and adapt effective interventions from other countries
- NGOs often focus on reaching out to larger population and achieving the objectives are priorities for funding
- Need for skills and capacity to document processes, methods and the tools

Barriers for road safety research for NGOs

- Knowledge gap of research and methodologies
- Lack of coordination among funder, researchers and NGOs
- The terms and conditions of funding
- The process of research ethics

The roles of international organizations

- Provide platform to exchange experiences, success stories and best practices
- Offer partnerships and collaborations between more experienced and less experienced NGOs
- Advocate for research funding for NGOs at global and national level
- Facilitate coordination between academics and practitioners
- Offer capacity development trainings and courses for NGO fraternity

The roles of global alliance

- In recent years the alliance has stepped up with funding and technical support
- Ensuring sustainability of such activities
- Monitoring the member NGOs in using the existing tools
- Promote coordination between NGOs and national/global academic institutions

8. Prof.dr. H.R.Pasindu, University of Moratuwa, Sri Lanka

Regrettably he had to cancel his visit to Delhi for reasons of a medical emergency. At his request Paul Wesemann reported briefly about his efforts to strengthen the research infrastructure.

Firstly he has realized important research facilities in Sri Lanka by:

- Creating a knowledge bank for publications
- Improving the quality and accessibility of crash data
- Initiating a scheme for research grants

Secondly he took initiatives for international cooperation:

- Aiming at a regional research center in S-E Asia
- Based on a consortium of universities and institutes in Indonesia, India, Thailand and important universities in Sri Lanka
- Depending of support from the international community to guarantee sustainability and continuity

9. Conclusions and Recommendations

The moderator has wrapped up the presentations and has brought forward following conclusions and recommendations.

Building a sustainable knowledge and research infrastructure is critical for improving road safety in LMICs. The following recommendations can guide this process:

1. **Develop Road Safety Institutions:** Establish lead agencies, data observatories, and research institutes dedicated to road safety.
2. **Improve Data Collection and Reporting:** Standardize data definitions and ensure comprehensive reporting from police, hospitals, and insurance firms.
3. **Encourage International Collaboration:** Partner with international organizations for knowledge transfer and capacity building.
4. **Involve Local Communities and NGOs:** Empower NGOs to play a more active role in road safety advocacy and education.

By following these steps, LMICs can significantly reduce traffic fatalities and create safer, more sustainable road systems.



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Thanks to Prerana!