



Road safety and post crash activities

– Emergency response and Insurance for victims

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Outline of Presentation

- ❑ Background
- ❑ GMS countries' road crash fatality rates
- ❑ Reality in emergency response: Yangon-Mandalay Expressway
- ❑ Emergency response times in GMS countries
- ❑ Insurance for road crash victims
- ❑ Recommendations



Background

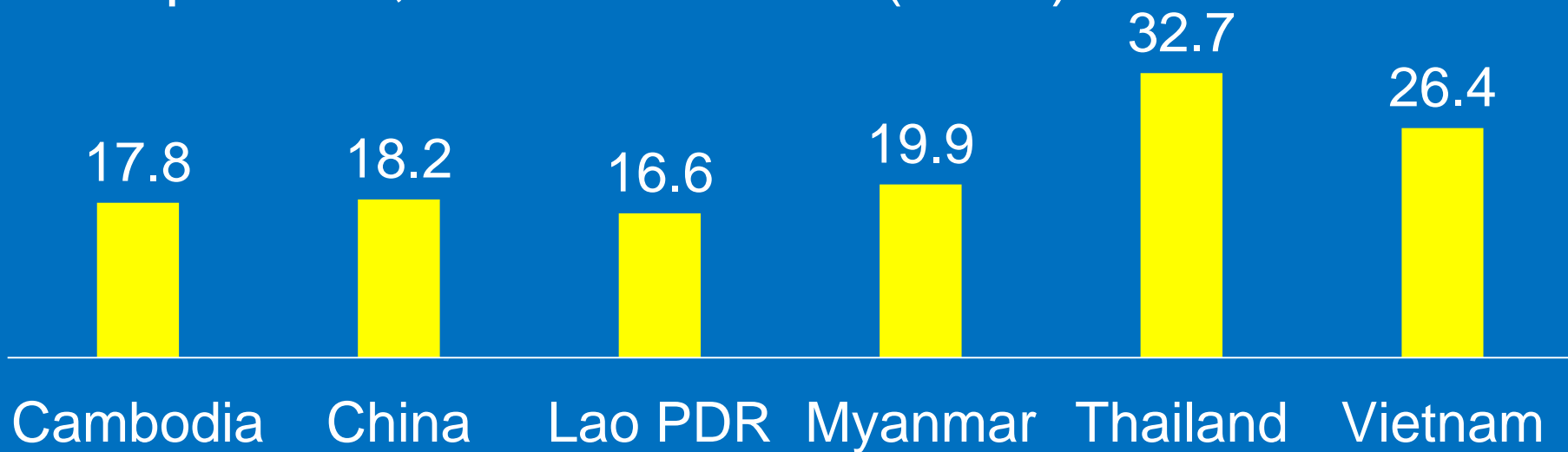
- Globally, road crashes is
 - 8th most leading causes for deaths in 2016
 - causing 2.5% of total deaths (1.35 million)
- higher than infectious diseases of diarrhea and tuberculosis
- Overall economic costs of road crashes: 2 to 5 % of GDP in many developing countries
- Low income countries no economic safety nets for victims of road crashes
- Impacts due to timely response and post crash activities for road crashes less focused on
- Lack of post-crash activities: tremendous suffering, poverty, permanent disability



GMS countries' road crash fatality rates

Two and three wheelers, pedestrians represent combined 82% of total deaths

Fatality rate
per 100,000 inhabitants (2016)





Reality in emergency response: Yangon-Mandalay expressway 1/2

- No access control; called “death highway”
- Fatality rate 270 per billion vehicle km (2016)
- Vehicles, pedestrians, motorcycles, animals share road
- Limiting speed 100 km/hour max
- Response stations (one emergency ambulance with 3 service providers) in every 64 km
- Providers are not medics (received emergency first aid training only: **cannot administer medical assistance until reach medical facility**)
- hired through contract (not government staff)



Reality in emergency response: Yangon-Mandalay expressway 2/2

- Ministry of Health and Sport took actions to provide emergency response for road crash victims: Emergency Call Center (ECC: dial 192) starting Aug 2016
- When ECC receives info on incidence of crash - dispatch nearest emergency team
- At ECC, no regular proper medical staff to oversee (ECC staff are non-government too)
- Budget: not enough
- Emergency response time in 2018 was 14 minutes: average



Emergency response times in GMS countries (not for comparison)

- Cambodia: 70% (Phnom Penh), 59% (provinces) less than 2 hours to reach hospitals (2010)
- China: 17 to 54 minutes (12 General Hospitals, 2017)
- Thailand: 75% cases response time 14 minutes
- Viet Nam: average 17 minutes



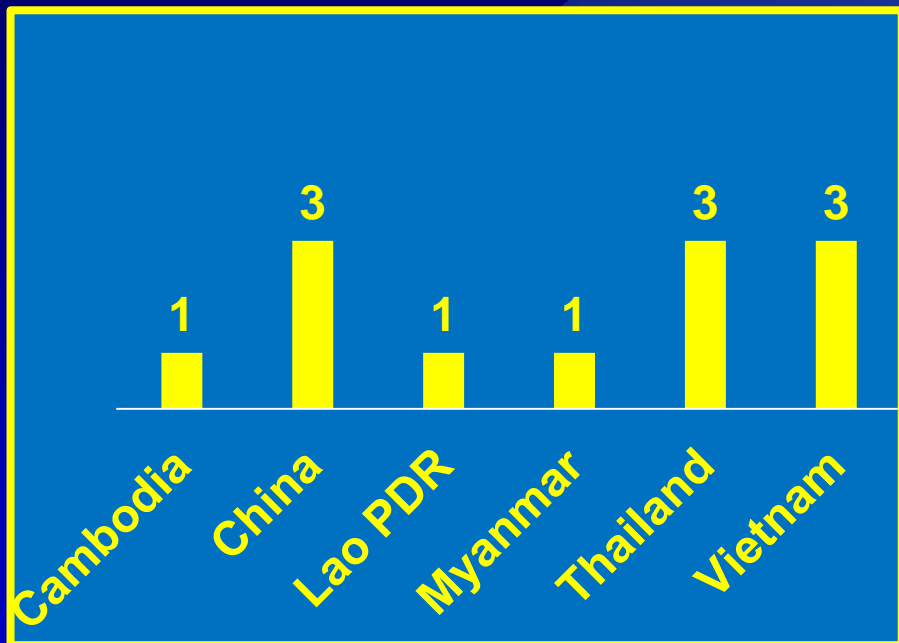
Health insurance for road crash victims

- Collated Information relating to vehicle and health insurances in Myanmar (premium, benefits, conditions, ownership: public or private).
- Sources of information include:
 - published sources
 - Inquiries to insurance entities (both public and private)
- Calculated economic costs from fatalities and injuries
- Injury treatment costs are from hospital den studies (road crashes)
- Compared insurance compensation with calculated loss and injury treatment cost

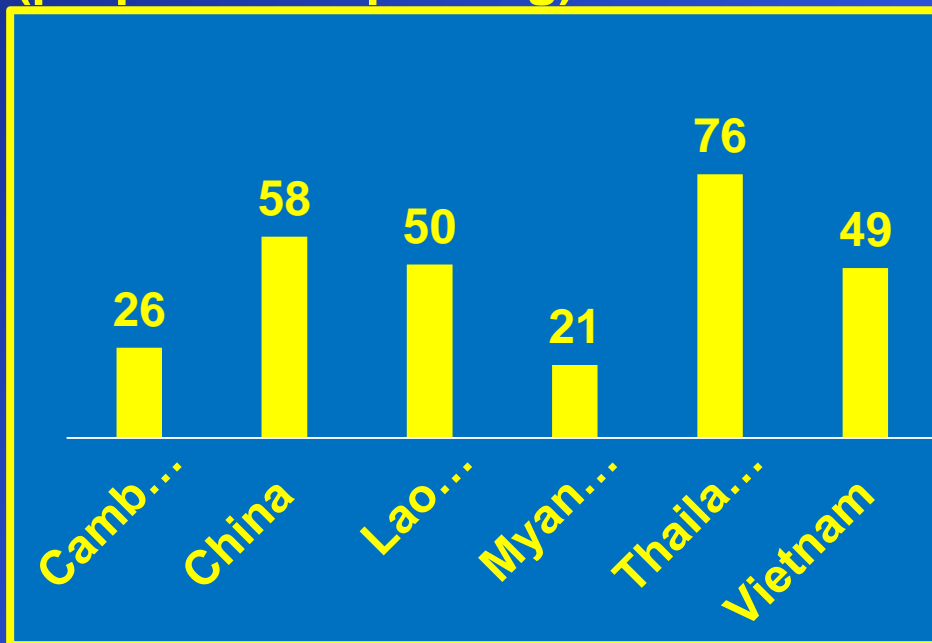


Health financing - that matters...

Government health expenditure as % of Gross Domestic Product (GDP)



Compulsory financing arrangement (as % of current health expenditure) (prepaid: risk pooling)



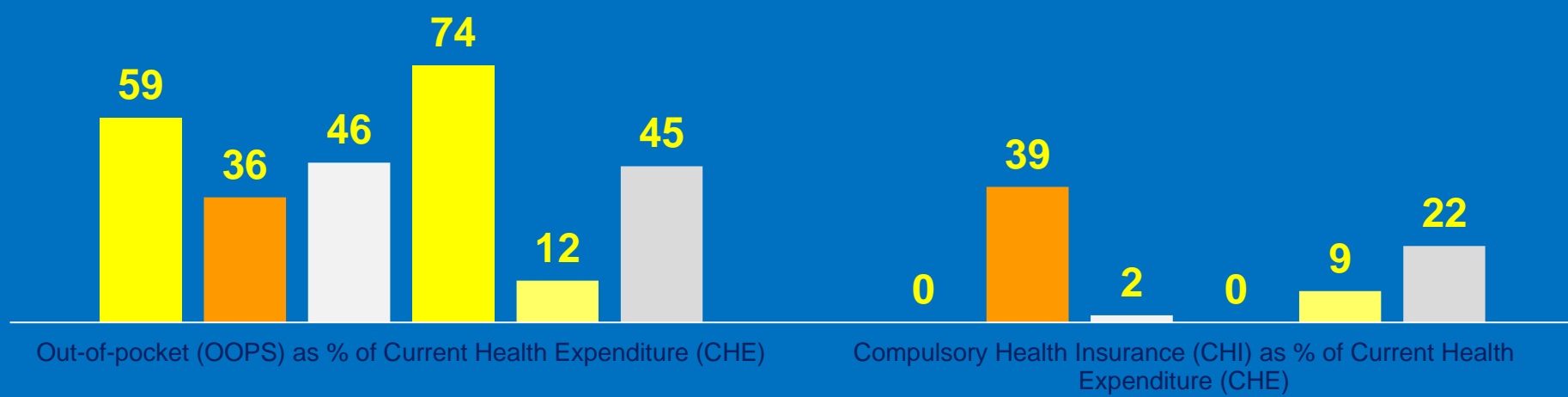
- CAM and MYA - low % of compulsory financing
- Beneficiaries need be on their own for health expenditure (treatment for road crash injuries as well)



Out of Pocket Expenditure (OPE) and Compulsory Health Insurance (CHI) as % of Current Health Expenditure (CHE)

OPE as % of CHE

CHI as % of CHE



■ Cambodia ■ China ■ Lao PDR ■ Myanmar ■ Thailand ■ Vietnam

- CAM and MYA: higher % of OPE; no compulsory health insurance
- Has catastrophic consequences for health expenditure



Insurance schemes and coverage: motorized vehicles

- Government Scheme (Myanma Insurance)
- Basic 3rd Party (compulsory)

Premium	Benefits
\$1.3 per year	Fatality (\$660) injury (max: \$529)

- Comprehensive Coverage (voluntary)

Premium	Benefits
1% of vehicle value	100% of basic 3 rd party benefits



Insurance... Cont.

- Motorcycle insurance (compulsory)

Premium	Benefits
\$3 per year	Fatality (\$660) injury (max: \$529)

- Private insurance (focus on vehicle damage)

Premium	Benefits
1% of vehicle value	Fatality (\$660) injury (max: \$529)



Health insurance schemes: all voluntary

- Myanmar Insurance, Basic package

Premium	Benefits	Remarks
\$7 to \$41 per year Age 6-60: \$7 Age 31-75: \$41	\$7 per hospitalization day (max 60 days)	Can buy max 10 units (hospitalization only)

- Surgery Package

Premium	Benefits
\$11 per year	Surgery cost (max: \$331)

- Travel Insurance

Premium	Benefits	Remarks
\$0.2 (per unit cost for one road trip)	\$1,986 (fatality)	Can buy maximum 2 units per trip



Insurance benefits for hospital care

Current national insurance benefits

- paid as a lumpsum per hospitalization day (\$3 or \$7)
- recipient needs carefully use to maximize benefits

International

Reimburse 80% of:

- bed and board
- general nursing service
- use of operating rooms/ equipment
- use of recovery rooms/ equipment
- laboratory tests
- x-ray
- Medicine: used in hospital



Economic loss from fatalities

Calculated as *economic loss = productivity loss + quality of life loss + hospitalization cost + funeral cost*
(*police and court cost not identified*)

Age	Loss (\$) 2018
18	120,927
30	78,989
33	69,641
40	49,409
50	23,980
60	2,121
Average cost of a fatality	60,205



Economic loss from severe injuries

Cost Category	A severe injury loss (\$, 2018) Average (maximum)
Hospital cost	90 (426)
Productivity loss during recovery	285
Quality of life loss (60% of lost output)	225 (427)
Total Cost	600 (1,138)

- Severe injury refers to those needing neurosurgical, surgical and orthopedic treatment



Insurance compensation vs calculated economic loss

- **Fatality**

Insurance Payment	Calculated Loss
\$660 (for one unit of insurance)	\$60,205 (average)

- **Injury**

Insurance Payment	Calculated Loss
max \$529 (for one unit of insurance)	\$600 (average) \$1,138 (maximum)

- **No coverage for disability**



Summary of Insurance

- Existing insurance schemes (either government or private) can't cover actual economic loss from road crash fatalities or injuries
- Particularly compensation for fatalities is extremely low (just around 1% of what is lost actually)
 - Will have devastating consequences on the dependents of victim
- Compensation for injuries is also low as 50%
- No compensation for disabilities



Recommendations: emergency response for road crashes

- Yangon-Mandalay Epwy: **death is likely** if crash injuries are severe – need ambulances with paramedics
- ADB ongoing/future assistance:
 - Road Safety TA 9743 for East West Economic Corridor
 - sustainable road safety regime
 - Proposed: Second GMS Highway Modernization: *Bago-Kyaikto Expressway*
 - train Highway Police patrol units – prevention
 - ambulance/equipment – emergency assistance



Recommendations: insurance

- Need to review existing insurance schemes to ensure compensations reflect actual loss
- Vehicle compulsory insurance requires significantly better compensation for injuries and deaths (compulsory nature: to enforce, during vehicle registration extension)
- Need more public awareness for Government health insurance (just started in 2019)
- In-depth study fatalities and injuries to understand more about real socio-economic cost:
 - increase premium; increase benefits
 - based on actual wages; disability considered



Thank You

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